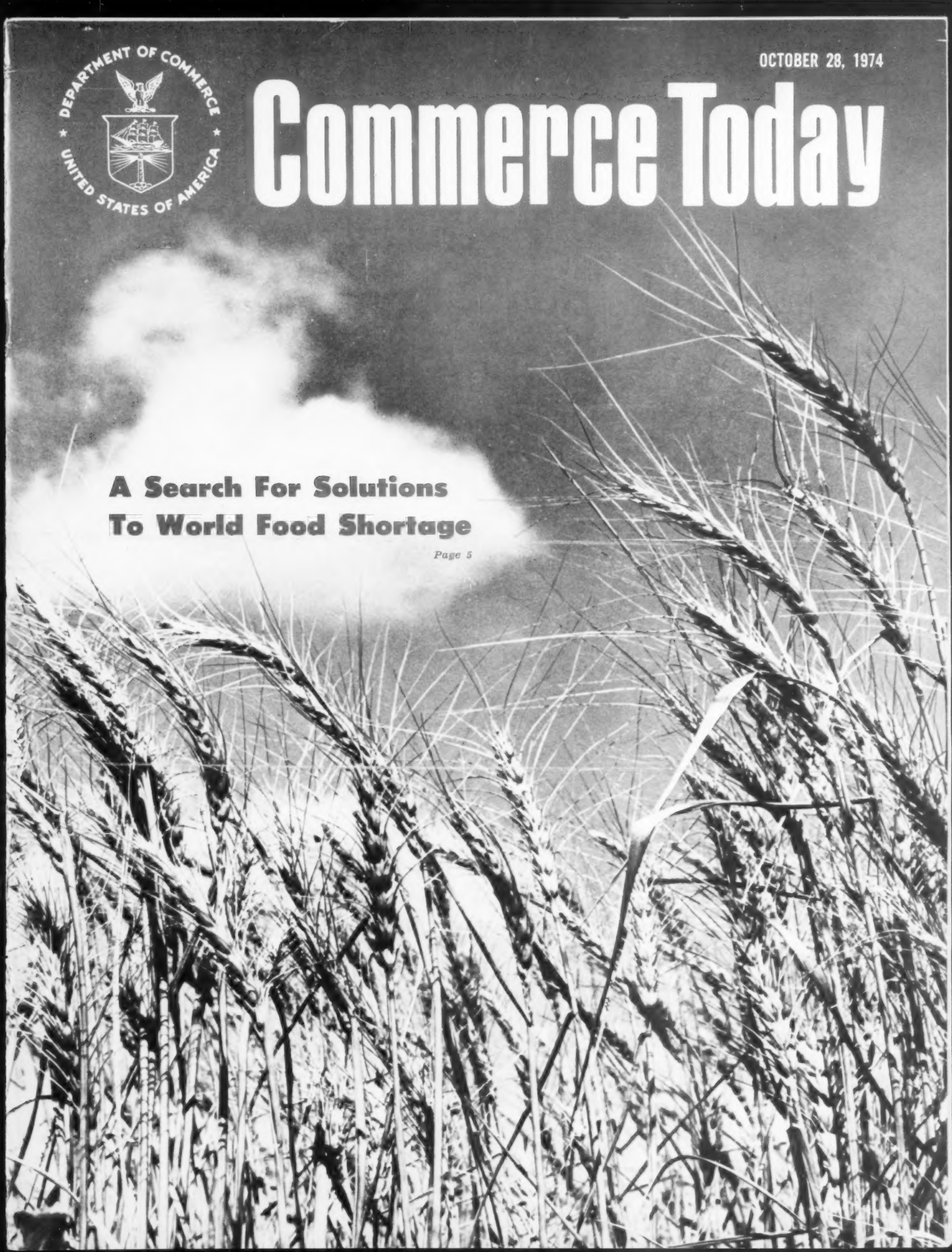
OCTOBER 28, 1974

Commerce Today



A Search For Solutions To World Food Shortage

Page 5

FROM THE
SECRETARY

The Meaning Of WIN For Industry

WIN. This is the inscription on the lapel button that President Ford now wears in all his public appearances. It is more than a slogan. It is a necessity. It represents the will of the American people, of all sectors of our economy, to win the fight against inflation. Win we must. For inflation can be an insidious crippler, moving through one segment of the economy to the next in domino fashion. The immunization we need is a total national mobilization. That is what the WIN button signifies.

As in wartime—when the V for Victory sign mobilized our resources for an all-out effort—so let us hope that the WIN psychology takes hold to summon that extra effort and sacrifice that is needed of us all.

Some industries have already been operating on what amounts to an emergency basis, and the results have been impressive. The Department of Commerce and the Federal Energy Administration have been working to develop energy conservation programs on an industry-by-industry basis, beginning with discussions with such major energy-consuming industries as petroleum refiners, and producers of steel, cement, paper, textiles, aluminum and chemicals. Industry has already reduced its energy consumption by about 5 percent per unit of output. We expect industry to improve upon that accomplishment. As we continue our discussions with other industries, we can see that the President's goal of cutting industrial oil use by 175,000 barrels a day during 1975 is achievable.

Energy conservation, of course, is one of the critical battles to be won in the war on inflation. It is one in which everyone can make a contribution, whether he or she is a captain of industry, a truck driver, a housewife, a government employee, a student. But since industry is the largest consumer of energy, this is where the battle will be most decisively fought. As the costs of fuels have risen so have the prices of consumer goods. Energy conservation is a major weapon in our arsenal for curbing these costs.

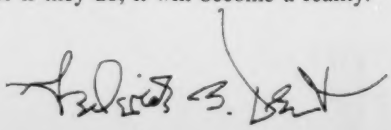
So is improved productivity, which is fundamental to wages, prices and profits in a competitive situation. Improving our productivity performance does not just mean working harder; it means working smarter, accomplishing and producing more with less effort by being more efficient.

Winning means achieving President Ford's immediate objective of reducing oil consumption by one million barrels a day by the end of 1975 without affecting industrial output.

It means that utilities will need to convert from oil to cleaner coal processes and nuclear fuel to further curtail our dependency on imported oil. It means the ever more efficient use of energy by industry, and to this end the Department of Commerce is developing energy use guidelines to suggest ways to achieve maximum efficiency. It means reviewing all governmentally-imposed impediments to energy conservation that affect the day-to-day programs of government and private industry, and the achievement by the auto industry of more efficient automobiles in the next five years.

The great voluntary program of asking everyone to enlist in the war on inflation will only work as long as each volunteer is prepared to contribute something, as long as all of us pull in the same direction. Naturally, each skirmish will not be decisive. There will be setbacks. But it is in the best interests of all of us to keep fighting.

WIN. It is more than a slogan or a battle cry, or at least it can be much more if everyone does his part. For if they do, it will become a reality.



Commerce Today

Vol. V, No. 2, October 28, 1974

2 Economic Highlights

The consumer sector was strong but investment weakened and Real Gross National Product again declined in the third quarter; each of the three quarterly declines in 1974 were due primarily to different factors.

4 Newsmemo

5 Conference Seeks Solution To World Food Shortage

Early in November the first world food conference in history will be held in Rome. The subject has obvious immediate significance for the U.S. food industry.

9 Transplanted Management Skills Spur Big Productivity Gains

Third in the series of articles concerning how various U.S. firms are increasing their productivity features the San Diego plant of Sony Corporation of America.

11 Project Independence Won't End U.S. Foreign Oil Connections

To plan the nation's future energy posture, far-reaching international considerations associated with this program must be understood.

14 Energy Management Digest

15 Domestic Business Report

14-1 chance of colder winter means bigger fuel savings from lowered thermostats—Matching grants boost foreign exchange earnings—Accord gives U.S. firms access to engineering data—Unit helps states plan to cushion economic shock of reduced rail service—Plan outlined to rehabilitate, expand marine fisheries—Meeting will get public input on data needed from 1980 Census.

23 International Commerce Report

Quarterly World Market Report—Polish leader Gierek's visit to U.S. stirs business prospects—Agenda for 61st National Foreign Trade Convention—Reports from U.S. trade exhibitions abroad—Economic summaries from Nigeria, Rwanda, Denmark, Guyana—Calendar for world traders—Licensing, trade opportunities worldwide.

U.S. DEPARTMENT OF COMMERCE

FREDERICK B. DENT
Secretary

JOHN K. TABOR
Under Secretary

BASIL R. LITTIN
Special Assistant to the Secretary for Public Affairs

THOMAS A. BELL
Director of Communications

RICHARD BALENTINE
Editor

CLARENCE M. ZENS
Associate Editor, International Commerce

ARTHUR McDERMOTT
Associate Editor, Domestic Business

AMERICO A. W. FAVALE
Graphics Coordinator

Staff Writers: ***Douglas F. Carroll, Felix Cotten, Margaret L. Hanson, Leslie Wilder.***

Published biweekly by the U.S. Department of Commerce, Washington, D.C. Annual subscription rate $29.80 ($7.45 additional for foreign mailing, $5.75 additional for domestic air mailing). Single copy $1.15. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce District Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.
Microfiche copy available at $1.45 per issue from National Technical Information Service, Springfield, Virginia, 22151. Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C., 20230.

Contents of this publication are not copyrighted unless indicated, and if not so indicated, the articles may be reproduced in part or in full without any prior consent. The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through August 31, 1976.

COVER: *Food and its production is increasingly in the headlines throughout the world these days as shortages appear everywhere. A conference opening in Rome early in November, the first world food conference in history, will endeavor to sort out the problems involved and try to find solutions. Story beginning on page 5 has considerable significance for the giant U.S. food industry.*

Real GNP Declines 3% In Third Quarter; Consumer Sector Up, Investment Weaker

Economic Highlights is prepared by James L. Pate, Assistant Secretary of Commerce for Economic Affairs.

Purchases of consumer goods increased at a satisfactory pace in the third quarter but minus signs appeared on all categories of investment and consequently total economic activity again declined. The nation's output of goods and services, after adjustment for inflation, has now decreased for three consecutive quarters in one of the most unusual business slowdowns in the post-World War II period.

The preliminary reading on Real Gross National Product for the third quarter showed an annual rate of $821.1 billion compared with $845.7 billion in the fourth quarter of 1973, and the annual rates of decline for the three quarters of this year were 7.0, 1.6 and 2.9 percent, in chronological order. Inflation, as measured by the GNP implicit price deflator, surged up to an annual rate of 11.5 percent following rates of 9.4 percent in the second quarter and 12.3 percent in the first.

In 1974, quarter-to-quarter changes in the various major components of GNP have been unusually capricious, and the rapid shifts can only partially be accounted for by the unusual events of the past 12 months—a historically high rate of inflation, the shutoff of foreign oil and later the quadrupling of the price, shortages of some other basic materials, and the policy of strong restraint on the money supply.

Perhaps the two most significant occurrences in the third quarter were the 3 percent gain in personal consumption expenditures, concentrated heavily in automobiles and food, and the 4.9 percent decline in nonresidential fixed investment—a sector that previously had been considered one of the strongest growth factors in the economy.

The automotive sector has been subject to many special factors over the past 12 months, and an upward shift was not surprising—even with surveys reporting consumer confidence at a low ebb. Part of the rise may have been due to environmental and price considerations that made the 1974 models more attractive than the 1975 autos. Therefore, further rises in auto production in the immediate future seem unlikely unless the downward trend in auto sales in recent weeks can be reversed. Output of durable goods, which is dominated by the developments in autos, swung sharply downward in late 1973 and early 1974, and then moved upward at annual rates of 6.2 and 4.2 percent in the second and third quarters of this year.

A higher volume of food sales was the main reason for a 2.5 percent jump, on an annual rate basis, in output of nondurable goods in the third quarter. Increased food sales may simply represent a return to a more normal rate of consumption. In the three previous quarters, however, nondurables declined at annual rates of 4.4, 6.0 and 0.5 percent.

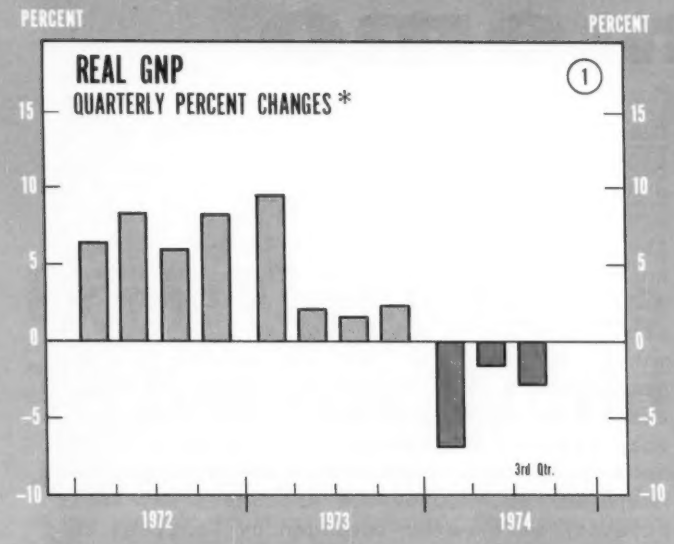
The plunge in total investment in the third quarter amounted to $8.2 billion in constant dollars compared with a drop of $6.0 billion in the economy as a whole. (The strong negative effect of investment plus relatively small minus signs in other sectors was partially offset by the $4.0 billion increase in consumer items.)

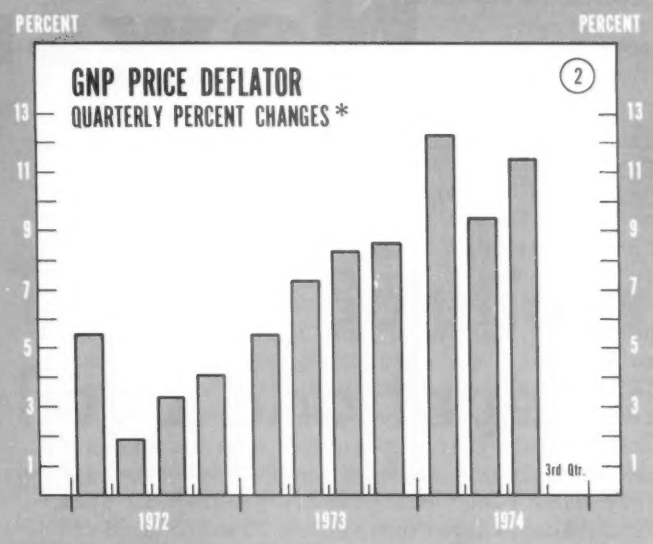
About $5 billion was accounted for by a decline in the rate of inventory accumulation. This may be an encouraging sign that many corporate managers are less concerned about shortages than in the recent past and now believe they can operate with a proportionately lower stock of goods. Another disincentive for inventory building is the lack of funds available for purchasing stocks, and the high interest cost involved in carrying inventories. The abnormally low additions to inventory in the third quarter substantially reduce the possibility of a continued drag on the economy from the liquidation of excessive stocks. Inventories registered an unprecedented increase of $20 billion in the fourth quarter of 1973; the quarterly figures for this year were $10.6 billion, $8.2 billion, and $3.2 billion. These increments, expressed at annual rates, compare with actual increases of $7.0 billion and $10.8 billion in 1972 and 1973. A smaller dollar decrease, but perhaps much more significant, was the $0.9 billion drop in business structures. This represented a decline of 12.9 percent on an annual rate basis following a slight drop in the second quarter and an 11.2 percent gain in the first. The much larger equipment category declined only slightly and in general has remained stable during 1974.

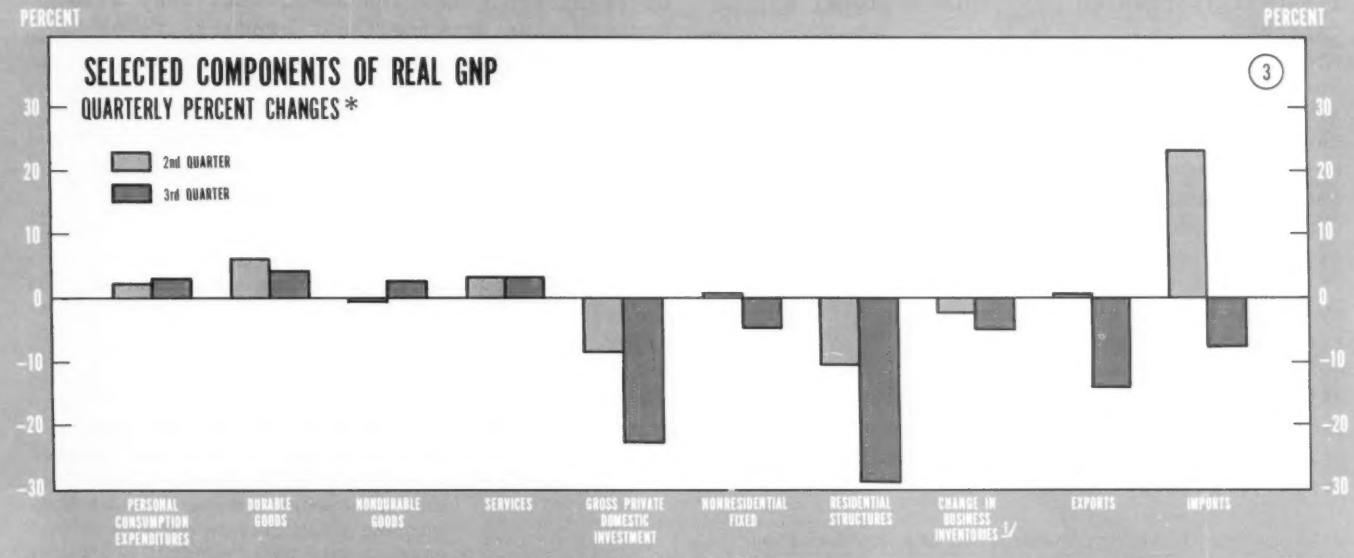
There are several possible reasons for weakness in business fixed investment. Businessmen may have made rapid reductions in their plans for capital outlays early in the current slowdown. However, in current-dollar terms, fixed investment continues to increase, and it seems more likely that, because of inflation, companies simply are unable to buy as much as planned with the dollars allocated. Furthermore, financing plans may have gone awry under the present pressures in money and capital markets. Finally, the auto-manufacturing, petroleum, and other industries made unusually rapid shifts in their capital outlays as a result of the oil embargo. Some industries increased their projected investment expenditures, but these were approximately offset by declines in other industries and the present weakness could be merely a reflection of these short-term shifts.

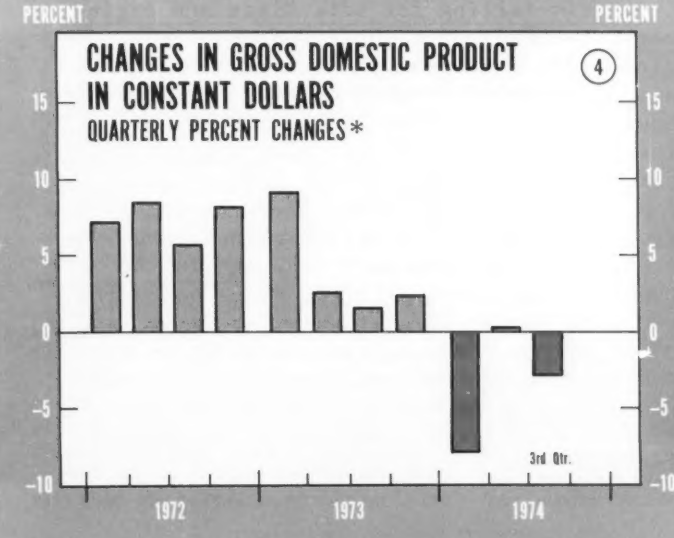
Homebuilding once again fell off in the third quarter, and the current level of starts and permits precludes any significant revival in this sector over the next several months.

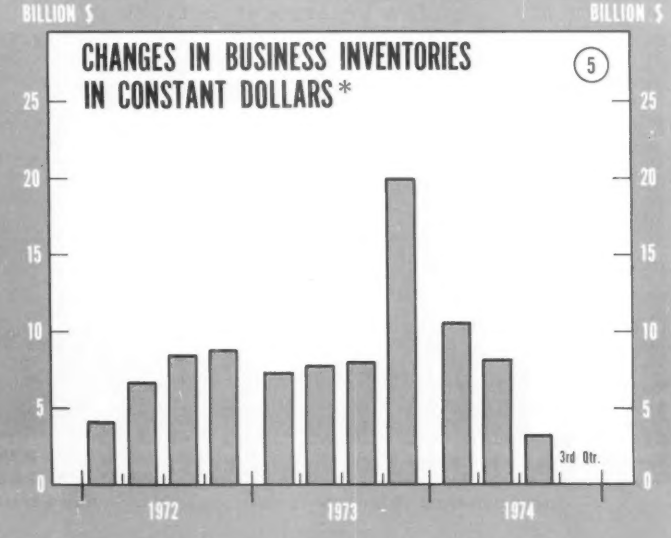
In general, each of the quarterly declines this year could be attributed to different factors. In the first quarter, consumer goods and inventories fell off sharply but business fixed investment continued to increase and the foreign sector was up sharply because a relatively small amount of oil was being imported. In the second quarter, the biggest change was in the international sector as oil imports began flowing again, sending the foreign merchandise trade balance into the red, and accounting adjustments were made for the takeover of large U.S. holdings in Arab nations. Consumer purchases, especially autos, were fairly strong. In the third quarter, there was only a small further decline in the foreign sector, consumer goods and services were strong, and the weakness was centered in the investment items.











* Seasonally adjusted annual rates

1/ Billion dollar change in business inventories

Newsmemo

Fly U.S. Flag. Here's why the Commerce Department has started a program under that name: the 21 regularly scheduled and supplemental U.S. air carriers contribute more than $3 billion in gross balance of payments inflow annually through their foreign earnings. While providing direct employment for nearly 40,000 Americans, the U.S. private international air carriers generate more than 125,000 jobs in service and non-aerospace fields. Additionally, more than 100,000 Americans are involved in the manufacture of commercial transport aircraft. Commerce's "Fly U.S. Flag" promotional program is part of an Administration Action Plan to assist financially-pressed U.S. international air carriers.

Cargo business is also a big factor in the air transport balance of payments. In the last decade air passenger activity has tripled, but air freight totals have more than quintupled. The carriers work closely with the Commerce and State Departments to assist potential exporters and transport their products; they also promote sales overseas of air service technology and airline support equipment. A part of the "Fly U.S. Flag" program is a standard clause in all federal contracts and sub-contracts that provides for use of U.S. carriers whenever possible for international movement of personnel and cargo.

Welcome to Indiana, newest state to have a site in the Commerce Department network of district offices. Previously served by the Chicago District Office, Indiana will have its own office beginning in late November. The full range of Commerce Department services, including advice and assistance of a trade specialist and access to a library containing Commerce Department reports and other specialized business publications, will be offered to Indiana businessmen. The state, with more than 8,000 manufacturers, is among the top ten states in manufactured exports. The District Office address is U.S. Dept. of Commerce, Federal Office Bldg., Indianapolis, Indiana, 46204. Until late November call the director, Milton R. Sherar, on 317-633-4537 in his interim State House quarters.

Housewares industry groups have filed objections to a proposal that would include them under food additive regulations. The Food and Drug Administration seeks to include items that come into contact with food--cutting boards, pots and pans, utensils, coatings, cleaners--under the umbrella of additive restrictions. This would require housewares makers to prove that the substances in their products are safe or are approved as food additives. A recent federal court ruling that ceramic dinnerware comes under the 1958 food additive amendment is the basis for the FDA's action. Housewares producers say their products were never intended by Congress to be regulated under the amendment. They also contend that proving their products to be safe would be an unwarranted expense, considering their long-standing consumer safety record.

Consumers are spending more for home food preparation items. Factory sales of such products--small kitchen appliances, cookware, etc.--topped $1 billion in 1973, and despite hefty price increases will show volume increases of 10 to 20 percent this year. A major factor prompting this trend is that while at-home food costs are going up, the away-from-home food prices are going up even more steeply. Families are willing to take over more of the preparation of various foods if they can save money by doing so.

Demand is falling for scientists and engineers. An index of such demand, published since 1961 by a recruitment advertising agency, uses 1961 rates as 100. It has bounced from 198.5 in 1966 to 40.3 in 1971. The index has been on the rise since 1971, but leveled out this summer and showed a small decline in July to 152.9. In August the index fell to 127.7, with declines largely centered in northeastern U.S. and in the chemical engineering field. Since bottoming out in 1971, demand has shown up first in major design and construction firms, nuclear enterprises, utilities and petroleum companies, and then spread to other industries such as electronics, machinery, chemicals, computers and even aerospace.

Commerce Today
Vol. V, No. 2
October 28, 1974

Rome Conference To Seek Solutions To Serious World Food Shortage

As anyone who has been to a supermarket lately knows, there is a food problem. As they probably also know, the difficulty is not confined to the United States.

To grapple with the worldwide food problem, the first world food conference will be held in Rome from Nov. 5-16. In the words of Secretary of State Henry A. Kissinger, the conference "will discuss ways to maintain adequate food supplies and harness the efforts of all nations to meet the hunger and malnutrition resulting from natural disasters."

The beginnings of the present world food crisis go back to 1972 when the output of cereals (wheat, coarse grains and rice) in the world declined for the first time in more than 20 years and by a large amount—33 million tons. World production of cereals, presently totaling about 1,200 million tons, has to increase on an average by about 25 million tons each year to meet rising demand.

The sudden drop in the 1972 production created a heavy deficit at a time when some supplier countries were engaged in programs designed to bring down their large surpluses.

Weather effect on production

Also, this was the first time in recent decades that adverse weather affected production in several sub-continents simultaneously—USSR, China, India, Australia, Sahelian Africa and South-East Asia. Unlike previous years of production shortfalls, the USSR did not attempt to tide over the crisis by tightening its belt, but entered the world market to make purchases of grain on an unprecedentedly large scale.

As a result, the wheat stocks of the main wheat exporting countries fell from 49 million tons in 1971-72 to 29 million tons in 1972-73 and are expected to be even lower in the current year. Stocks in many importing countries were also sharply reduced. Rice reserves were virtually exhausted.

Although the 1973 harvests were reasonably good, the increase in production in the market economy countries was insufficient to prevent a further fall in exporter stocks. Production recovered in most developing countries, with the main exception of Africa's Sahelian Zone countries, where a major international emergency operation was necessary to avert widespread starvation.

While the precipitous turn in the world food situation was obviously caused by the disastrous weather in 1972, there was also a most unusual coincidence of events which compounded the effects on prices, trade and payments.

The unprecedented boom in economic activity in the developed countries, leading to a highly buoyant demand for commodities, the worldwide inflationary forces accentuated by monetary instability and speculative activities—all of these factors

FLOW SLOWING DOWN—*Global food shortages have promoted the calling of the first world food conference, which will meet in Rome from Nov. 5-16 to seek ways of maintaining adequate food supplies. Present crisis began in 1972 when grain production declined significantly.*

MODERN METHODS—*Increased adoption of modern farming methods has helped boost output in the developing nations, but now a world fertilizer shortage, accompanied by higher prices for fertilizers, threatens to wipe out much of the gain.*

have synchronized since 1972 to transform the general economic scene in which the tight food situation made its impact.

As a result, world cereal prices rose steeply in 1972 and, in spite of a good harvest in 1973, reached even higher levels in that year. With dwindling food reserves, the food aid programs were cut and the developing countries with food deficits faced, and still face, the very difficult problem of having to finance a much higher food import bill. Food prices have gone up sharply all over the world and have hit particularly hard the poorer sections in the developing countries.

Two other elements in the present crisis—fertilizers and energy—burst onto the scene in 1973. A cyclical production shortfall has been characterizing the fertilizer market since the end of 1972, and led to not only high prices but even a physical shortage in 1973. The rise in petroleum prices in late 1973 not only increased the cost of fuel in agriculture, but in many cases has led to shortage and high prices of feed stocks for fertilizer manufacture. In particular, the developing countries which have been making commendable progress in expanding the use of fertilizer are faced with the serious problem of fertilizer shortage at a time when they need it most.

Malnutrition

In addition to the accumulating problems of food production there is the equally vital issue of the nutritional adequacy of available supplies within countries, and the extent of under- or malnutrition. Scientists differ on how to define malnutrition, but a conservative view of the definitions currently in use finds that out of 97 developing countries, 61 had a deficit in food energy supplies in 1970.

In the Far East, Near East and Africa, 20 to 25 percent of the population is estimated to suffer from significant under-nutrition. Altogether in the developing world (excluding the Asian centrally-planned economies for which insufficient information is available) malnutrition affects some 400 million people; a less conservative definition might double the figure.

This is not just a cold statistic among statistics; it describes the daily physical privation of fellow human beings, adversely affecting health and physical growth and seriously reducing the capacity of children to learn and adults to work . . . and this is a conservative statistic.

Demand and supply outlook

Looking to the future, a preliminary forward assessment of food demand and supply has been made for the period up to 1985 on the basis of assumptions concerning growth of population and gross national product, and excluding any major changes in governments' policies or relative prices. On this basis, world food demand in the seventies and eighties is calculated to grow at a rate of 2.5 percent per year, of which 2 percent would represent population increase and 0.5 percent increased purchasing power.

This, however, masks major differences between country groups: thus in the developed countries taken as a group the growth rate of demand is projected at 1.6 percent per year, but in the developing market economy countries it is projected at 3.7 percent in terms of farm value.

It also masks differences among the developing countries. Thus, despite the rapid rate of demand growth, there would still be in 1985 some 26 countries with a combined population of 365 million in which average per capita demand would fall short of food energy requirements.

Under the influence of rising income levels, the demand for expensive foods would increase more rapidly than for cereals, starchy roots and sugar. Thus the demand projections for the developing market economy countries show annual rates of growth of 3 percent for cereals, but 4.8 percent for fish and 4.7 percent for meat.

In spite of this, the composition of the average diet in the developing countries in 1985 would still be markedly "inferior" to that of developed countries, 72 percent compared with 47 percent of calorie demand coming from cereals, starchy roots and sugar.

These demand projections are considered to be conservative for three reasons: they

take no account of the possible introduction of programs to alleviate malnutrition; they make no allowance for changes toward a greater degree of equality in income distribution and consequent increases in food purchases by lower income groups; and they do not fully take into account the increased commercial demand for certain foods brought about by the rapid urbanization which is occurring everywhere. In other words, circumstances could arise in which food demand in developing countries would grow more rapidly.

On the supply side the basis for making projections is of necessity less sure, the only readily available evidence consisting in historical trends which can be extrapolated, subject to a variety of assumptions and limitations. The period 1961-63 to 1973 was chosen, after much consideration, as being the most relevant for extrapolations. The results give an annual production growth rate between 1969-71 and 1985 of 2.4 percent for developed market economy countries, 2.6 percent for developing countries, and 3.5 percent for eastern Europe and the USSR.

Comparing production growth extrapolations with demand growth projection shows that although food supplies at world level might be in approximate balance in the eighties, the situation would be extremely difficult for most groups of developing countries. But this balance at the world level hides the contrast between the developed countries, with production capable of expanding much faster than demand, and the developing countries, with demand expanding much faster than production.

All this relates merely to trends, but there is also the important question of what fluctuations in production above and below the trend are to be anticipated. One consideration is the weather, which, as noted earlier, may vary substantially from year to year in individual countries but which only rarely puts on a uniformly bad performance over nearly all of the earth's surface as it did in 1972. Whatever is the answer to this question, there is undeniably a strong case for a new strategy in respect to food stocks.

There is a second consideration. In former times when a country, as a result of bad weather or natural disaster, had a bad harvest, it tended to tackle the problem by tightening its belt as much as it could internally; many people went hungry and in extreme circumstances many died, and cattle were slaughtered.

Today, when crops fail, the governments turn to the world community to replenish their supplies, either on commercial or food aid terms. This practice must be expected to continue.

Thus, while the amplitude of weather fluctuations may not have changed in comparison with previous decades, the amplitude of the fluctuations in demand on the world market has very significantly in-

CUPBOARD GOING BARE?—*Grain elevators such as these in Hutchinson, Kansas, are holding less as world grain reserves are drawn down in the wake of unusually bad crops and several other unfavorable factors. Wheat stocks alone worldwide dropped 20 million tons in two years.*

NEEDS STILL GROWING—*Food demand is expected to grow more than twice as fast in the developing nations in the coming decade as it is in the developed countries. Despite expected balance between supply and demand on a worldwide basis, many developing countries will continue having nutritional problems. Sixty-one developing nations had food energy deficits in 1970.*

STILL A BIG FACTOR—*Despite diminished reserves the United States will continue to play a major role in meeting both the long and short term need for more food. These combines are working on an Alliance, Nebraska, farm providing much needed cereal grains for the world's use.*

creased. With rising production, even the same percentage change means an increasingly large volume in absolute terms.

For instance, the gross cereal "gap" between their production and consumption needs of the developing countries would, according to the trends, rise by 1985 to around 85 million tons per year, almost three times their gross imports in 1969-72. But in the absence of effective stock policies, in a year of bad harvests these countries' import demands might rise to some 100 million tons, or even more. If, by misfortune, a large developed country experienced a crop failure in the same year, the total import demand in the world could, in the absence of adequate stocks, be perhaps as high as 130-140 million tons of cereals.

This is the arithmetic of combining foreseeable output fluctuations caused by weather with a cumulative failure of production in many developing countries to keep up with the growth in their domestic demand.

It is clear that under the existing trade arrangements, the majority of cereals-importing developing countries will not be able to finance such heavy imports. In that situation, the only alternative would be a deliberate restriction of consumption in these countries by rationing or other means, and this would depress their whole economies. That is why it is so important also to assess the extent to which these gloomy trends could be altered by engineering a faster expansion of agricultural output in the developing countries.

Production potentialities

Without doubt an enormous reservoir of production potentialities—physical, biological and human—remains untapped. For example, many millions of hectares of land suitable for farming remain unused, especially in Latin America and Africa. Admittedly, there are obstacles such as inaccessibility until roads are built, insufficient technology as to husbandry of tropical soils after removal of tree cover, and prevalence of infestations such as tse-tse fly in Africa.

In livestock production there are vast potentials for improving health conditions, upgrading herd quality through genetic improvements of many millions of animal stock, and expansion of the feed base, especially the pasture potential of grasslands in the tropics and sub-tropics. The levels of animal nutrition and health attained in the advanced countries show that tremendous scope exists for improvement in most developing areas.

Likewise with fertilizers, pesticides and herbicides, and improved quality seed: in spite of the impressive progress in both consumption and production in developing countries, the per hectare use of these inputs remains on average low, and the full potentialities of the soils, the irrigation water and the high-yielding varieties will not be realized until it becomes normal to use much larger quantities.

Indeed, the major potential for future increases in production by the developing economies lies in increasing yields per unit of land or per animal. There is need for further investment in research, extension, credit and supplies. Also there is still considerable fishery potential in the seas to be exploited.

Most important of all are the human resources, the hundreds of millions of farmers with little land and less know-how whose hearts' desire is to achieve a better life for their families. Here is an immense potential waiting to be released and organized and waiting for new approaches and sympathetic understanding of their attitudes of problems, along with the more generous provision of the needed tools of production.

What is needed are imaginative and bold approaches to farmers' organizations, advisory services, agricultural education and extension, and all these backed by an enlightened price policy.

The fact that recent trends in food supply and demand extended to 1985 on the assumption of no major policy changes could lead to a serious imbalance in the international situation, highlights the urgency for an in-depth discussion of modifications in official policies concerning food.

One set of problems relates to periodic food crises resulting from circumstances outside man's control: the weather, earthquakes and other natural disasters.

The central longterm problem needing attention is how to expand food production more rapidly in the developing countries. This requires investment on a massive scale to harness the enormous physical resources available, develop new technology, organization and services. Many of the governments of these countries may need to consider how to rearrange their investment programs in order to allocate larger shares to agricultural development.

Thus, the delegates are assembling in Rome at a time of well-warranted concern, and a time of opportunity for the world's agricultural community to dispel that concern.

At three sessions held earlier this year, the preparatory committee for this conference explored all aspects of the problem and narrowed the field of issues on which the conference will focus.

A large interagency task force including representatives from the Departments of State, Agriculture and Commerce has prepared formal position papers for presentation by the U.S. delegation at Rome. Agriculture Secretary Earl Butz will head the U.S. team. The State Department's Edwin M. Martin is U S. coordinator.

Transplanted Management Skills Spur Big Productivity Gains

"They treat you with dignity and respect."

"Oh, I love it."

"I wouldn't want to work anywhere else."

Those are real employees talking; if they don't sound like the workers at your plant, perhaps it's time to take a few pages out of the management philosophy at Sony Corp. of America's San Diego factory, where they work.

Many Americans think of Sony as a Japanese company. In fact, this U.S. subsidiary is approximately 50 percent American owned, and in the San Diego plant 98 percent of the workers are Americans.

But that hasn't prevented the management there from adopting a number of techniques that had borne fruit earlier in Japan. For this reason, many refer to it as the Japanese management system. This appelation is vigorously challenged by both the Japanese and U.S. executives at San Diego Sony, who prefer to call it a "hybrid" system. Stated simply, it amounts to "if it works, adopt it," which sounds as American as building a better mousetrap.

The plant produces 17-inch and 19-inch color television sets plus a small number of stereos. The monthly output for television sets has increased from 5,000 a month in 1972 to 20,000 in 1974. This growth can be attributed to three factors: first, the San Diego plant utilizes the most up-to-date equipment—always a major contributor to productivity increase; second, an increase in manpower—from 150 workers in August 1972 to 400 in January 1974; and third, if the adage "a happy worker is a productive worker" is true, then the unique type of "humanistic" management system employed at Sony must also contribute to its rate of productivity.

Between 1960 and 1971, output per manhour in U.S. manufacturing increased at a 2.9 percent annual rate, the lowest among the world's 11 leading industrial nations. Japanese manufacturers, in the same period, were increasing their productivity at 11 percent a year. The productivity of the San Diego plant is approximately the same as for Sony assembly workers in Tokyo, although Sony does not provide many of the fringe benefits which it gives its employees in Japan such as housing, life tenure or huge bonuses. Absenteeism is less than one percent and the turnover rate is approximately 4 percent, most of which can be attributed to the wives of U.S. servicemen who must resign when their husbands are ordered elsewhere.

The management system used at Sony emphasizes reliance on subordinates to show initiative and increased responsibility rather than top management ruling by fiat; decision-making by consensus; encouraging a close communication network and concern for employees as "human beings" to be valued.

Under this system information tends to flow from the bottom up. There is great emphasis placed on trying to "pick up opinions" of subordinates. Supervisors expect workers to solve many of their own job-related problems with minimal guidance. The Japanese manager prods, directs, raises questions and provides encouragement, but only steps in himself as a last resort.

Understandably, where American workers may not have been used to making decisions, they may find it difficult. For instance, Sony accounting manager Masbaki Tezulla remembers that "One of my workers had a problem and I gave her guidance as to various ways she could go about finding a solution. I purposely did not provide the solution outright. After repeated attempts to get her to try and solve the problem with only minimal direction from me, she told me that 'to show how to solve

This is the third in a five-part series of articles authored by White House Fellow Betty Shelton, as part of Commerce's continuing emphasis on improving productivity in U.S. industry. Miss Shelton, who was assigned to the Department of Commerce, visited five firms in different industries and of varying sizes which have been particularly successful in implementing programs to boost productivity. She talked with management and workers alike, to obtain as complete a picture as possible of what the changes had meant at all levels.

NO WALLS—*To foster closer communication, Sony has eliminated almost all private offices. Here, the accounting manager (foreground) sits among his subordinates.*

DECISION MAKING—*Sony encourages workers to solve their own problems when possible. Managers step in only as a last resort.*

the problem is your job, not mine.'"

Under this type of system there are less rules and restrictions than in most American companies. No time clocks are evident. Hopefully, everyone feels that he or she is playing an important role in the company.

Again, unlike most American firms, most management decisions are made by consensus. This type of system has several advantages and disadvantages. Dick Crossman, Personnel Manager, says that decisions made by consensus are "more often more right and more thorough, because *all* possible aspects are reviewed before decisions are made". This approach tends to relieve any one individual from having the burden of major mistakes and leads to a more relaxed work atmosphere. It also provides that each will have his day in court and, even if he is not entirely in agreement with the decision, his views have been aired.

Two potential problems of consensus decision-making are frustration at the time involved and the potential for severe infighting at the meetings. The production manager at Sony was frustrated at times because groups of people were making decisions which in most companies he could make alone. Thus a certain amount of adjustment on his part was required. The size of the meetings also required some adjustment, since in many American companies a criterion for a good meeting is keeping the group as small as possible, and any delay in the decision-making process is seen as inefficiency.

Both the American production manager and the personnel manager were pleased to be included in many meetings dealing with problems outside their domain. In fact, they said that this was a key reason for not wanting to leave, and both expressed the opinion that it would be very difficult to be confined again to the traditional "Organization Chart" where individuals may be slotted into narrow functional areas.

Openness encouraged

Close communication is encouraged through the use of open spaces, limited private offices, proximity, and face-to-face communications rather than use of telephones.

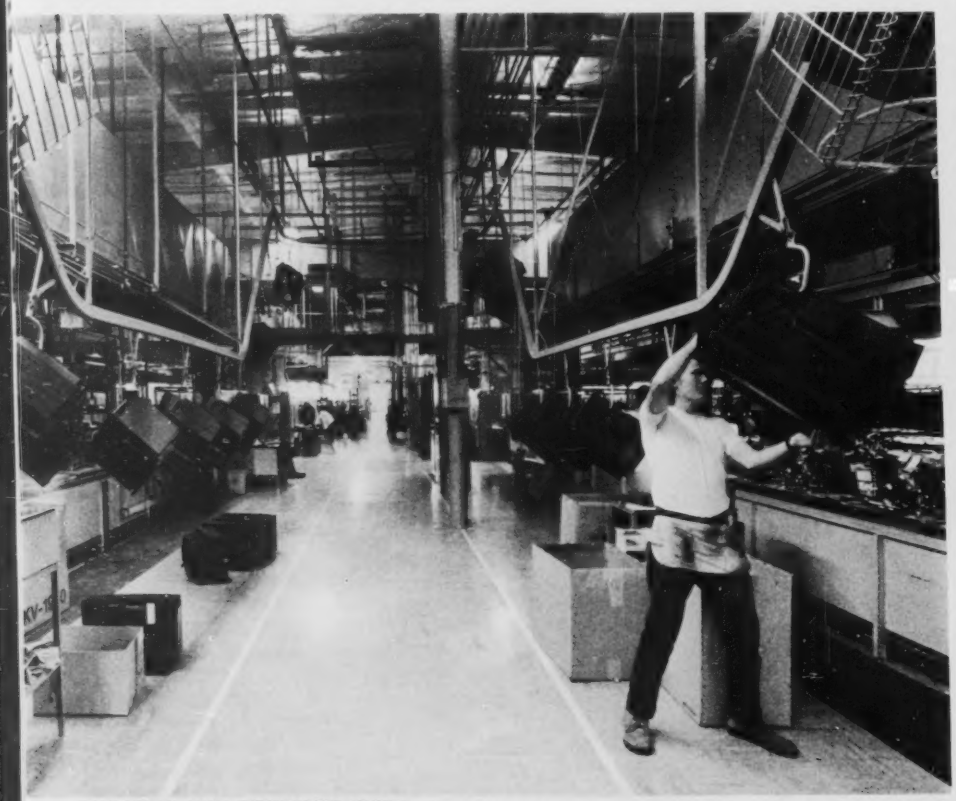
Those who do have private offices, such as the general manager and his assistant, will more likely go out to talk to an employee rather than call him in. The Japanese views walls as impeding communication and coordination.

The accounting manager sits among his subordinates, where he is better able to observe their operations, and discuss specific problems with a minimum amount of time delays.

Perhaps the most impressive aspect of the Sony management system is its emphasis on "humanistic values" where employee-employer relations are concerned. This system includes (1) a conscious effort on the part of each supervisor to know every employee and his family situation. Everyone is on a first name basis. (2) the hourly employee is given first priority and employees are encouraged to bring their personal problems to supervisors. The production manager stated that "if an hourly employee wants to see me I drop everything else." (3) the company follows a strict policy of promoting from within. In fact, all of Sony's supervisors were trained by Sony. (4) there is a corporate policy of "no layoffs" which gives the employee relative job security. (5) the company, recognizing that assembly line work can be boring, encourages its employees to learn several jobs and provides increased wages as an incentive. (6) Sony for the first time gave a Christmas bonus last year.

General staff meetings are also held where company policy is explained and employee inputs encouraged. Occasionally, employees meet with the production manager and the personnel managers without the participation of foremen and other supervisors.

Many workers praised their managers, saying they felt they really were more concerned about them "as people rather than as dollar signs," and felt they know much more detail about the plant's operations than managers elsewhere.



VARIETY AND RESPONSIBILITY—*Sony's management style emphasizes "humanistic values." Employees are urged to learn several jobs, to relieve the boredom of assembly line work.*

Project Independence Won't End Nation's Foreign Oil Connections

There are far-reaching international considerations associated with Project Independence which the Federal Energy Administration says must be understood in order to plan the U.S.'s future energy posture. Actually the roots of the whole project are international, having been devised in order to lessen U.S. dependence on foreign sources of energy.

Oil plays a dominant role in supplying energy worldwide, the FEA notes. Most nations are unable to provide a significant percentage of their energy needs domestically with the exception of the United States, the Soviet Union, and a handful of other countries.

For the past 20 years, U.S. demand for energy has grown at a rate of 4-5 percent annually, with current per capita use of energy equal to six times the average for the rest of the world.

Accompanying this growth rate, however, has been an overall decline in domestic energy production. U.S. coal production has not increased appreciably since 1942. U.S. crude oil production leveled off in 1970. And, since 1968, natural gas production has not kept pace with consumption. The resulting increased reliance on foreign oil caused U.S. imports to expand from 15 percent of the U.S. oil supply in 1960 to 30 percent in 1972.

At pre-embargo levels of U.S. consumption, production, and imports, if no measures are taken to restrain the growth in demand or increase domestic energy production, the United States may have to import nearly 50 percent of its oil supply in 1985.

OPEC control

A major factor affecting the stability and price of internationally supplied oil is the changing relationship between the international oil companies and producing countries. The past three years have witnessed a shift in control over production. Until 1969, major oil companies, through their foreign affiliates, could determine levels of production, investment, exports, and prices. As host nations have increased their control over these aspects of production, the role of companies has been increasingly limited.

Oil-producing countries coordinated their efforts through the Organization of Petroleum Exporting Countries. A landmark of OPEC's importance was the 1968 adoption of Resolution XVI.90 on uniform petroleum policies. The resolution called for:

- Government sovereignty over oil resources.
- Substantial government participation in production.
- Posted prices to be determined by the government.
- Reasonable renegotiation of contracts.
- Disputes to be handled only by the national courts.

Threatened with the expropriation of their concessions, oil companies have had little impact on the enforcement of this resolution. Posted prices on oil have quadrupled since January 1973. Participation agreements have altered, with most producing countries demanding at least a 60 percent participation and a price for the sale of their oil equivalent to about 93 percent of the posted price. They have elevated their governments' revenues from 90 cents per barrel in 1970 to $7 per barrel by January 1974.

In effect, oil companies no longer are able to assure consumers that they can supply oil on a regular basis and at predictable prices.

The embargo

OPEC controls 66.9 percent of the world's reserves, and 55.2 percent of its production. Any alteration in its petroleum policies has an immediate and far-reaching effect on the world oil situation.

On Oct. 16, 1973, the Arab OPEC

STILL A FACTOR—*Despite Project Independence, foreign energy sources will continue to play a significant role in the U.S. energy picture for the forseeable future. This pipeline transports Libyan oil to the Mediterranean, for shipment to oil-importing nations.*

DEEPWATER TRANSFER—*Mooring buoys, anchored well offshore, are one solution advanced by the Federal Energy Administration for handling the cargo of the very large crude carriers which are expected to carry an increasing share of the world's petroleum shipments. Floating cargo hoses attached to the buoy carry the oil to storage tanks ashore.*

countries (OAPEC) announced a crude oil production cutback of 5 percent and threatened an embargo. They made a further cutback on Nov. 4, to 25 percent of September 1973 production, and at the same time imposed an embargo on shipments to the United States, which is estimated to have cost this country about $20 billion, or about 4 percent of the 1973 GNP. If the United States were to suffer a similarly extensive embargo in the future, the cost would again be great.

In deciding the domestic/international structure of any future U.S. energy posture, the prices paid for energy by the United States must include the costs associated with the relative stabilities of its domestic versus imported energy supplies. This means that the effective cost of imports encompasses, in addition to their actual prices and quantity, some measure of the likelihood of an interruption, according to FEA.

Producing country revenues

This significant gap between oil production costs and current world oil prices gives the oil-producing countries a great deal of flexibility in adapting their production/pricing strategy to whatever energy strategy the U.S. adopts under Project Independence.

OPEC countries unilaterally tripled the posted price of their oil in January of 1974. This increase has meant a jump in income for all OPEC members from $15 billion to almost $100 billion in 1974.

The controversy over the effect of large dollar reserves held by oil producing countries will continue. Many economists believe that several Middle East and African oil-producing countries cannot absorb the anticipated vast quantities of oil revenues into their economies. In some cases, oil income this year will be more than the total gross national product last year (for example, Nigeria's 1974 oil income of an estimated $9 billion will exceed its 1973 GNP by $1 billion).

For most countries the first course of action will be to invest in their own economies. Because of the finite nature of oil reserves and the probability that the world will be placing increasing emphasis on other energy sources, the producing nations want to diversify their own sources of wealth. This will necessitate attracting technology from the more developed countries.

Producing countries are expanding into other aspects of the petroleum industry, financed by their surplus funds and prompted by a growing determination to nationalize their oil. For example, petrochemical and fertilizer plants are under consideration in several countries; a continued growth in refinery building is expected; and, there is pronounced emphasis on the purchase and construction of Arab-owned tankers.

The future international energy environment implies significant monetary payments from consuming to producing countries. The potential effect of this monetary shift from the West to the Middle East is great. For importing nations the higher oil prices will mean estimated expenditures of $100 billion for foreign oil supplies in 1974. This is a fivefold increase over the 1972 figure. Developing countries will pay $15 billion for foreign oil in 1974, three times their bill in 1973; the $10 billion difference is greater than all the foreign aid they received in 1973.

Without positive changes in current OPEC prices and terms for recycling oil revenues, oil-importing countries are left with the financial dilemma of choosing among progressively expanding foreign investment, reducing imports other than oil, seeking additional foreign oil, or increasing their indebtedness to producing nations. There are limits to how much import dependent countries can reduce imports without severe economic disruptions in production, employment, and trade.

For the above reasons, FEA says that a coherent national energy policy, such as Project Independence, will require careful consideration of several factors.

The inherent insecurity of oil supply presents a need for the importing nations to coordinate their programs, to stockpile reserves, conserve energy, and share technology, avoiding duplication and concentrating on areas of highest energy potential.

The global energy situation reveals a trend in oil consumption likely to exceed the expansion of energy sources. Energy conservation on the part of the world's largest consumers would reduce their dependence on imports. The United States has considerably more energy alternatives than other industrialized nations, most of which import far greater percentages of their energy. Moreover, less-developed countries are in an even less tenable position, given their deeper dependence on producer countries for their energy.

Producers' goals

The goals of the producing countries cannot be overlooked. They want rapid economic and industrial progress. Increasing oil revenues can provide the financial means to that end.

Neither the producing nor consuming countries can ignore the international impact of their policies. High oil prices and their effect on the world balance of payments, would appear to rule out the individual profiting by any country, while neglecting the needs of the rest of the world. A healthy world economy is vital to *all* nations.

For the United States there are three primary options for achieving an acceptable energy consumption posture, given the apparent risks and uncertainties associated with worldwide energy supplies:

- Increasing the amount of energy supplied domestically;
- Constraining the rate of growth in consumption;
- Enhancing the security of its energy imports.

U.S. domestic energy policy must be carefully framed in recognition of the changing international scene. The *total* cost of domestic development, national

security, and international economic realities must be weighed.

Part of this total cost will include the price of an upgrading of U.S. ports to handle the incoming foreign oil. Even though government, industry, and the private consumer continue to maintain stringent fuel conservation practices, FEA expects the level of petroleum imports to increase to about 6.6 million barrels daily by 1980.

Unfortunately, the United States does not have ports deep enough to accommodate the supertankers that are carrying the bulk of the world's oil. Our 35-foot deep harbors, suitable for ships of 40,000 to 70,000-deadweight tons are largely inaccesible to today's 200,000 to 400,000-ton VLCC's (very large crude carriers) and even larger ULCC's (ultra-large crude carriers) which require water drafts exceeding 100 feet. The deepest ports on the U.S. West Coast are capable of berthing only 100,000-ton ships.

Transfer problem

As a result, supertankers must transfer U.S.-bound petroleum into smaller ships for final delivery or oil must be transshipped from foreign ports in the Caribbean. A 400,000-ton supertanker may require as many as seven 70,000-tonners to deliver its three million barrel cargo.

This inability to handle VLCC's currently excludes the United States from approximately 60 percent of the world's oil fleet capacity. In FEA's view, this country will be further excluded as other nations increasingly construct superports, and as tankers under 40,000 deadweight tons will be scrapped without replacement.

At present, the United States is the only major oil importing nation which cannot accommodate supertankers. Both France and the Netherlands have undertaken dredging and enlargement programs which give them approximately a 10-year headstart over this country in the handling of supertankers. Supertanker ports have also been built in Japan, Ireland, and Italy.

FEA argues that the best way to secure imported petroleum supplies economically for this country is to construct offshore deepwater ports. One promising design utilizes the single buoy mooring anchored well offshore and equipped with a swivel which permits ships to "weathervane" 360 degrees to face into wind, waves, and current. Supertankers moor to the buoy, hook up to floating cargo hoses, and pump off their oil. The oil is transferred to storage tanks on land by a pipeline. Such offshore facilities have been used successfully throughout the world, and they also provide opportunity for local industrial expansion into adjacent cities.

Several deepwater projects are planned, pending Senate passage of enabling legislation, to handle deliveries of six million barrels of oil daily. Such offshore mooring facilities:

OFFSHORE OIL—*Fortunately for the United States, it has large untapped energy sources which will help lessen its dependence on foreign sources. The trick is learning to extract them from sources such as this offshore drilling rig without causing other problems.*

- will assure U.S. importers of access to the world's total petroleum shipping fleet;
- will be more economical than transshipping into small harbors, and should decrease the cost of imported oil; and
- will reduce environmental hazards to harbors and nearby wetlands.

The economic and environmental costs of dredging existing ports to the depths needed to berth supertankers are prohibitive. The port of Houston, for example, is 110 miles away from water 100 feet deep. In Philadelphia, a superport would require relocating the New Jersey Turnpike Bridge and removing the rocky bottom of the Delaware River, projects costing billions of dollars. In Baltimore, Norfolk, and Tampa, bridge and tunnel relocations also might be necessary.

Small tanker rates to rise

Until U.S. port facilities are capable of handling supertankers, the volume of imports arriving in smaller tankers will continue to rise. This dependency on smaller tankers is likely to drive up the rate which these ships can command.

At present, the cost of moving Persian Gulf oil to East Coast ports in 47,000-deadweight-ton tankers runs approximately $1.95 per barrel. In a 250,000-ton tanker, this cost would drop to 86 cents per barrel, according to FEA, and in a 500,000-ton tanker to 77 cents per barrel. On a per-ton basis, the freight savings between a 65,000-ton and a 500,000-ton vessel would be approximately $4.60 per ton on long hauls from the Middle East, FEA estimates.

In addition to their dollar savings in transport costs, FEA claims that supertankers can effect environmental savings. Their use results in less crowded sealanes and, consequently, less chance of spillage both from collision and from ships going aground. Without deepwater ports, the risk of groundings will increase each year as larger numbers of small tankers crowd into existing ports. Supertankers also reduce the chance of spillage during ship-to-shore pumping because of fewer pumping instances, in FEA's view.

In line with the building of new ports is the necessity for stepping up domestic refinery capacity. Without expansion of refinery capacity, the nation's energy problems will increase; we will become further dependent on decisions of foreign governments for adequate supplies of refined products, and our East and Gulf Coasts will risk the spillage of imported refined products that are more toxic than crude oil and resist dispersion.

A large number of domestic refining expansions have been announced, increasing national capacity by about three million barrels daily. Most of the major projects involve additions at existing refinery sites. Timing of the deepwater port enabling legislation is crucial to assure domestic refineries of a viable crude oil delivery system by 1978.

Port construction should take about two years, in addition to the year required to obtain construction permits; further delays may be caused by a shortage of construction materials. Some companies say they cannot afford delay and are investing in Caribbean transshipping facilities.

Energy Management Digest

ENERGY-INTENSIVE INDUSTRY MEETINGS...The Department of Commerce has been participating with the Federal Energy Administration in a series of meetings with representatives of six energy-intensive industries: steel, petroleum, chemicals, paper, aluminum, and cement. The purpose of these meetings was to obtain industry-wide agreement to a long-term voluntary energy conservation program which would include an energy management program of benefit to the industry and which would serve as a means of furnishing data to the Federal Government. The series of meetings culminated with Secretary Dent and Administrator Sawhill meeting with chief executive officers of the industries and the trade associations to obtain their commitment to the program, including appropriate energy efficiency goals. On October 16, Interior Secretary Morton, Secretary Dent, and Administrator Sawhill met at the White House with representatives of these same industries plus the textile industry, which has already implemented a prototype industry-wide energy conservation program. The leaders reaffirmed their commitment to long-term energy conservation and agreed to help in meeting the President's announced short-term goal of reducing oil imports by one million barrels per day by 1975.

ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION...President Ford is urging consideration of legislation to create an Energy Research and Development Administration. ERDA will develop technologies for efficiently using fossil, nuclear and advanced energy sources to meet growing needs in a manner consistent with sound environmental and safety practices. The agency will have responsibility for policy formulation, strategy development, conduct of energy R&D, and for working with industry to assure that promising new technologies are developed and applied.

STATES GET $10 MILLION PIE...The Federal Energy Administration has allocated $10 million to states and territories for energy management programs in Fiscal Year 1975. The funds will reimburse states for fuel allocation activities and to implement high priority energy management programs, including conservation and resources development. Under this program, FEA will reimburse the states on a two-to-one matching basis for the cost of qualifying programs. FEA previously distributed $5 million to the states in partial reimbursement for running their allocation programs prior to July 1, 1974.

WHEN IN DOUBT...TELECOMMUNICATE!...The energy problem may be new, but the means which Commerce's Office of Telecommunications offer to help solve it are even newer....stemming from advanced telecommunications technology. In its brochure "Conserving Energy Through Telecommunications," one may discover how wire, cable, and radio equipment and services can contribute an entire new dimension to energy saving. The focus is on using telecommunications to transfer information as a substitute for actual movement. Each information-transferring instrument is described in a brochure which can be obtained from the Public Information Office, U.S. Department of Commerce, Office of Telecommunications, Washington, D.C., 20005.

PROMPT ACTION ON APPEALS...Revised regulations have officially established procedures for FEA's Office of Exceptions and Appeals and Office of Private Grievances and Redress. The new procedures also require FEA to act within 90 days on all appeals and grievances. FEA took action after receiving numerous suggestions in response to a proposed rule-making on revising its procedural regulations. As part of the proposal, FEA requested and received advice on strengthening its grievance and appeals' procedures and make them more responsive to public needs.

ALLIES FOR ENERGY...France and the United States will cooperate in seeking to convert wind and temperature differences, currents and tides to useful energy. Energy research was one of several areas covered in a recently signed agreement continuing for the coming year cooperative ocean programs begun in 1970. Another joint U.S.-French effort will study remote surveillance systems for response and enforcement against ships discharging oil, as prohibited by national and international conventions. The U.S. Coast Guard will work with France's National Center for Exploitation of the Oceans to develop technical symposia and demonstrations of airborne surveillance systems.

14-1 Chance Of Colder Winter Means Bigger Fuel Savings From Lowered Thermostats

Americans should start lowering their thermostats earlier this fall to achieve fuel savings, because the chances are 14 to 1 that this winter will be colder than that of 1973, according to Commerce's National Oceanic and Atmospheric Administration.

Statistics from NOAA's Environmental Data Service can be used to estimate the percentage of heating fuels that can be saved during the coming winter for each degree that home thermostats are lowered. For example, the average householder in Bismarck, N.D., can reduce his use of fuel for heating by two percent for each degree he lowers the home thermostat. Average winter savings for each degree of lower indoor temperature would be three percent in Pittsburgh, Pa.; four percent in Portland, Oreg.; and more than five percent in Columbia, S.C.

In the northernmost of the 48 contiguous states, lowering the thermostat six degrees below its customary winter setting would reduced heating fuel used during winter months by 11 to 15 percent. The percentage saving realized increases in warmer regions, reaching more than 50 percent in the northernmost portion of Florida, Texas, and California. However, the actual quantities of heating fuel saved would be much greater in cold areas, because far more fuel is needed to heat buildings in colder areas.

These calculations employ a statistic called the heating degree day, a widely used, temperature-related measure of fuel demand. Heating engineers have found that when the outside daily mean temperature (the high and low divided by two) is 65 degrees or higher, most homes and buildings used no heat to maintain comfortable indoor temperatures.

This observation is the basis of the

Degree Of Difference

ESTIMATED PERCENT REDUCTION IN HEATING FUEL BY LOWERING THERMOSTATS SIX DEGREES

(Winter Season—November through March)

ALABAMA	
Birmingham	29
Mobile	39
ALASKA	
Anchorage	12
Barrow	8
Fairbanks	9
Juneau	15
ARIZONA	
Flagstaff	15
Tucson	41
Yuma	53
ARKANSAS	
Fort Smith	26
Little Rock	26
CALIFORNIA	
Los Angeles AP*	50
Sacramento	33
San Francisco AP	38
COLORADO	
Denver AP	18
Grand Junction	18
CONNECTICUT	
Hartford	17
DELAWARE	
Wilmington	20
DISTRICT OF COLUMBIA	
Dulles AP	20
FLORIDA	
Jacksonville	43
Orlando	54
Tallahassee	40
GEORGIA	
Atlanta	28
Savannah	36
IDAHO	
Boise	19
Pocatello	16
ILLINOIS	
Chicago/O'Hare AP	16
Moline	16
Peoria	17
INDIANA	
Indianapolis	18
South Bend	16
IOWA	
Des Moines	15
Sioux City	15
Waterloo	14
KANSAS	
Topeka	19
Wichita	20
KENTUCKY	
Lexington	20
Louisville	21
LOUISIANA	
New Orleans	41
Shreveport	34
MAINE	
Caribou	12
Portland	15
MARYLAND	
Baltimore	21
MASSACHUSETTS	
Boston	19
MICHIGAN	
Detroit, City AP	17
Houghton Lake	14
Sault Ste. Marie	13
MINNESOTA	
Int'l. Falls	11
Minneapolis-St. Paul	13
MISSISSIPPI	
Jackson	33
MISSOURI	
Kansas City	19
St. Louis	20
MONTANA	
Billings	16
Great Falls	15
Helena	14
NEBRASKA	
North Platte	16
Omaha/Eppley	16
NEVADA	
Las Vegas	32
Reno	19
NEW HAMPSHIRE	
Concord	15
NEW JERSEY	
Atlantic City AP	20
NEW MEXICO	
Albuquerque	22
Roswell	25
NEW YORK	
Albany	16
Buffalo	16
New York/JFK AP	20
NORTH CAROLINA	
Asheville	23
Raleigh	26
Wilmington	32
NORTH DAKOTA	
Bismarck	12
Fargo	12
OHIO	
Akron-Canton	17
Cincinnati AP	20
Toledo	17
OKLAHOMA	
Oklahoma City	24
Tulsa	26
OREGON	
Eugene	25
Portland	24
Salem	24
PENNSYLVANIA	
Harrisburg	19
Philadelphia	20
Pittsburgh AP	18
RHODE ISLAND	
Providence	18
SOUTH CAROLINA	
Charleston AP	36
Columbia	31
SOUTH DAKOTA	
Rapid City	15
Sioux Falls	14
TENNESSEE	
Memphis	26
Nashville	24
TEXAS	
Amarillo	23
Brownsville	53
El Paso	31
Fort Worth	33
Houston	42
UTAH	
Milford	17
Salt Lake City	18
VERMONT	
Burlington	14
VIRGINIA	
Norfolk	26
Richmond	24
WASHINGTON	
Seattle-Tacoma AP	24
Spokane	17
Walla Walla	21
WEST VIRGINIA	
Charleston	21
Elkins	18
WISCONSIN	
Green Bay	14
Madison	14
Milwaukee	15
WYOMING	
Casper	15
Cheyenne	16
Lander	15

* AP—Airport.

"degree day" concept. For each degree the daily mean temperature is below 65 degrees, you accumulate one heating degree day. Thus, if the daily mean temperature is 62, three degree days accumulate for the 24-hour period. For every degree day more fuel is required to maintain a comfortable indoor temperature. A day with a mean temperature of 35 degrees—30 degree days—would require twice as much heating fuel as a day with a mean temperature of 50—15 degree days.

Estimated percentages of heating fuel that can be saved in various regions of the United States during an average winter by reducing the indoor temperature settings by six degrees are shown on the accompanying table. These percentages are based on average heating degree day values for the 1941-70 winter seasons.

In Wilmington, Del., the table shows, a resident can reduce his average winter use of fuel for heating about 20 percent by lowering the thermostat setting six degrees. Average winter fuel savings in Fargo, N.D., would be 12 percent; Indianapolis, Ind., 18 percent; and Raleigh, N.C., 26 percent.

To calculate your fuel savings for each degree of indoor temperature setting reduction, divide the percentage reduction shown for your locality by six. At Fargo, for instance, dividing the 12 percent reduction shown in the table by six produces an estimated fuel saving of two percent for each degree the thermostat is lowered during winter months.

Catalog Covers All Census Publications, 1790-1972

A catalog of all census publications issued between 1790, when the first federal census was taken, and the end of the 1972 calendar year has been released by Commerce's Bureau of the Census.

The new volume is actually two separate catalogs under one cover—a reissue of a 320-page catalog, now out of print, listing all publications from 1790 through 1945, and a new 591-page addition listing 1946-72 publications.

More than 60,000 reports were published by the Bureau during the 1946-72 period, covering agriculture, construction, foreign trade, general economic statistics, geography, governments, housing, manufactures, mineral industries, commercial fisheries, population, retail trade, wholesale trade, special services, and transportation.

The catalog also contains sections on statistical compendiums and guides, methodological studies, and studies of foreign countries. Completing the contents are an appendix and subject and geographic indexes.

Single copies of the combined catalogs can be obtained for $7.10 from the Superintendent of Documents, U..S. Government Printing Office, Washington, D.C. 20402, or from Commerce District Offices in major cities.

Matching Grants Boost Foreign Exchange Earnings

The United States Travel Service hopes to turn a $43,600 investment into more than $1.6 million in foreign exchange earnings generated by international conventions. The Commerce agency has awarded matching grants to eight non-profit organizations to provide simultaneous translation equipment and interpreter services for international congresses and conventions held in the United States.

Recipients, amount of grants, and date and place of meetings are as follows:

- International College of Digestive Surgery, Third World Congress — $5,000 — October — Chicago.
- Association of Research Libraries, 40th General Council Meeting of the International Federation of Library Associations — $5,500 — November 16-23 — Washington, D.C.
- U.S. Ski Assn., Federation Internationale de Ski — $4,000 — May 25-31, 1975 — San Francisco.

The following events, which have already taken place, were also assisted by USTS matching grants:

- San Francisco Convention and Visitors Bureau, Distripress Congress—$1,950—San Francisco.
- World Poultry Science Assn., 15th World's Poultry Congress and Exposition—$10,000—New Orleans.
- International Federation of Surveyors, 14th International Congress of Surveyors—$7,310—Washington, D.C.
- International Assn. for Child Psychiatry and Allied Professions, Eighth International Congress — $3,840 — Philadelphia.
- National Academy of Sciences, Third International Congress of the International Society for Rock Mechanics — $6,000 — Denver.

Total foreign attendance at the meetings is estimated at nearly 6,000. Depending on the expected attendance, simultaneous translation is provided in a variety of languages, including English, French, Spanish, Italian, German and Russian.

Minority Business Progress Documented

Cooperative efforts between the federal and private sectors have given new impetus to minority business in the United States, according to Alex Armendaris, director of Commerce's Office of Minority Business Enterprise (OMBE).

Armendaris, in a luncheon speech before the Harlem Better Business Bureau, gave the following statistics of minority business growth to demonstrate the enormous strides of recent years:

- Through a network of 21 minority purchasing councils developed by OMBE, minority firms in 1972 received $86-million in business; in 1973, $215 million; in the first six months of 1974, $130 million.
- During 1973, revenues of 100 top black businesses grew from $510 million to $610 million.
- Small Business Administration-guaranteed government contracts to minority firms grew from $8.8 million in 1969 to $207 million in 1973.
- Competitive government contracts to minority firms were $3.7 million in 1969; in 1973, they were $523.5 million.

The OMBE Director also announced that Alyeska Pipeline Service Company of Anchorage, Alaska has reported letting contracts of $44 million to 40 minority contractors.

Under a cooperative agreement between OMBE, Alyeska and the U.S. Interior Department, OMBE has identified 350 minority firms interested in subcontract work on the trans-Alaska pipeline.

Armendaris urged more participation by the private sector, particularly financial institutions, in the effort to increase minority business as a base for social progress in the community.

New Paris Sales Office Promotes U.S. Conventions

A newly-opened International Convention Sales Office in Paris will encourage international associations to hold their conventions in the United States and promote foreign attendance at U.S. conventions. The office is part of the United States Travel Service, the Commerce agency responsible for promoting international travel to the United States.

The sales office is located in the American Embassy, and will be responsible for maintaining contacts with more than 1,000 international associations. Approximately 80 percent of the world's international associations are headquartered in Western Europe, many within an hour's flight time from Paris.

Paris convention sales personnel will also urge international business firms in France to stimulate employee performance by awarding incentive travel trips with U.S. destinations.

Serving as acting director will be Donn Dearing, who has been affiliated with USTS since 1961. He has served in several field offices, most recently at USTS' Paris office.

Overall responsibility for convention promotion will remain with USTS/Washington, where staff will continue to work with U.S. affiliates of international associations to obtain official invitations for the meetings to be held in this country.

NEW PARTNERSHIP—*NTIS Director William T. Knox (right) and Anthony J. Barrett, Managing Director of ESDU, look over a basic ESDU Data Item at the press conference held at the British Embassy to announce the new alliance. NTIS customers now have access to highly-specialized engineering data gathered from worldwide sources by the British firm.*

Accord Gives U.S. Firms Access To Engineering Data

U.S. customers will have easy access to an outstanding London-based collection of evaluated engineering design data through an agreement concluded by Commerce's National Technical Information Service.

The NTIS marketing agreement with Engineering Sciences Data Unit allows U.S. customers to obtain the highly specialized ESDU-evaluated data which has contributed to such advanced engineering projects as the supersonic Concorde aircraft as well as other NTIS information services. Orders will be airmailed immediately from London to NTIS customers in the United States.

NTIS Director William T. Knox said, "The ESDU data represent a valuable addition to the NTIS information collection of more than 800,000 technical reports. They fit well with material NTIS now markets for 13 other special technology groups in the U.S."

ESDU's Anthony J. Barrett said he was pleased ESDU is the first non-American organization to be selected by NTIS for agency distribution. "ESDU has been," he explained, "since 1940, a unique working tool for engineers—design data based not on a single investigation, but on collection from the worldwide sources.

The basic ESDU package is the *Data Item*—a set of loose-leaf sheets devoted to a single topic and containing graphical data, equations, and tables, together with definitions and terminology, explanatory matter and worked examples. Data are generally presented in non-dimensional form to assist application over a wide range of values of the parameters involved, and can be used with either SI (metric) or (customary) British Units.

Each ESDU Data Item attempts to be self-contained, and a collection within a subject. Aerodynamics or Fatigue, for example, form sub-series of which there are currently 14. These in turn are grouped into four series: aeronautical, mechanical, chemical engineering, and the fourth on data for more general industrial applications.

The present total of ESDU-evaluated data fills 49 large loose-leaf binders in the international A4 format and is growing.

ESDU-evaluated data can be purchased as complete series, sub-series, or as individual data items which can cost as little as $7. Significant reductions are available to sub-series purchasers who also contract to buy new additions as issued. This makes them associates of ESDU, which means that not only do they receive new material automatically, they are also entitled to consult ESDU staff by mail, telephone, telex or in person on any matter concerning the sub-series.

For details, contact George Kudravetz at 703-321-8530.

Fish Name Study To Aid Consumers

A contract authorizing studies that will eventually help consumers of fish and fishery products identify various species and products has been awarded to the Brand Group of Chicago by Commerce's National Oceanic and Atmospheric Administration. The agency said the $63,000 contract calls for the Chicago concern to analyze, plan, and recommend methods of developing an identification system to clarify and standardize market names of certain fish species and products.

NOAA's National Marine Fisheries Service will work with the contractor in seeking to identify inconsistent and obsolete names that may now be in use.

The need for such a program became apparent a few months ago when more than 500 responses were received to a Fisheries Service request for opinions as to the desirability of efforts to standardize the names of certain fish and fisheries products.

Thousands of species are known throughout the world by scientifically accurate names, but differing and sometimes confusing common names used in labeling products from some species cause problems in marketing and market development, and could disrupt attempts to write uniform labeling regulations.

The Fisheries Service also said there is increasing interest in using fish and shellfish that, to date, have not been marketed generally, and for which no common names exist that are familiar to consumers. A spokesman said that new food processing techniques such as the use of minced fish blocks present opportunities to develop new products that have no recognized market names.

Actions based on the resulting NOAA report will be coordinated with interested parties such as the Food and Drug Administration, the American Fisheries Society, consumer group, and the fishing industry.

Map Shows Distribution Of U.S. Low Income Families

A new Census Bureau map shows distribution by county of U.S. families living below the low-income level.

"Families Below the Low-Income Level in 1969 by Counties of the United States," is based on data from the 1970 Census. It is 42 by 30 inches. Seven colors ranging from cream to red indicate the concentrations by percentage of low-income families per county.

Single copies of the map (GE-50 No. 58) may be obtained for 95 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce District Offices in major cities.

Energy Labeling Program Picks Up Momentum

Eight more manufacturers of room air conditioners have agreed to take part in the Commerce Department's voluntary energy conservation labeling program. This raises the total to 18 manufacturers, responsible for producing two thirds of the units on the market, who have now signed up.

"Some of the manufacturers already have provided energy conservation labels for their models displayed in retail showrooms during the current selling season," Commerce Secretary Dent said. "All 18 firms intend to have their room air conditioners fully labeled next year."

Manufacturers which have now joined the program include Frigidaire Division of General Motors, Gibson Appliance Corp., Heat Controller Inc., Montgomery Ward, Sears and Roebuck, Singer, Western Auto Supply, and Kelvinator Appliance.

Other manufacturers taking part are Admiral, Airtemp Division of Chrysler, Carrier Air Conditioning Co., Emerson Quiet Kool Co., Fedders, General Electric (GE and Hotpoint brands), J. C. Penney, Westinghouse Electric, Whirlpool Corp., and York Division of Borg-Warner.

The energy labeling details were announced May 1 in the *Federal Register*. Under the program, companies agree to label their units with an Energy Guide Label. The labels enable purchasers to determine the energy efficiency of individual room air conditioner units and to compare the efficiency with all similar capacity units.

The room air conditioner Energy Guide Label makes use of a concept known as Energy Efficiency Ratio (EER). This is a number obtained by taking the air conditioner's cooling capacity (rated in Btu's per hour) and dividing it by the electricity demand (expressed in watts). The label also shows the range of energy efficiency ratios for all room air conditioners of similar size. The higher the EER on the label, the more efficient the unit is.

Labeling of room air conditioners is the first step in a broad voluntary energy conservation labeling program for household appliances including refrigerators, freezers, water heaters, dishwashers, clothes dryers and kitchen ranges. Single copies of a pamphlet on the program are available free from the Consumer Product Information Center (CPIC), Pueblo, Colo. 81009.

To assist consumers in choosing room air conditioners on the basis of cooling capacity and energy efficiency, the Department of Commerce has published a pamphlet titled "Energy Efficiency in Room Air Conditioners." Single copies of this pamphlet are also available free from CPIC.

Ups and Downs

Comparison of 1974/75 miles per gallon, by manufacturer and total fleet (sales weighted averages)

Mfr.	1974 MPG	1975 MPG	Percent Changes: Emission controls & system matching	Percent Changes: Model mix shift	Percent Changes: Total
GM	10.5	13.5	28.3	— .2	28.1
Ford	12.4	11.5	— 2.2	— 5.7	— 7.9
Chrysler	11.9	13.6	12.1	2.6	14.7
AMC	14.5	16.9	20.5	— 3.7	16.8
VW	22.2	22.9	3.8	— 1.0	2.8
Toyota	19.2	18.8	6.2	— 8.4	— 2.2
Nissan	20.7	21.4	8.1	— 4.5	3.6
Volvo	16.6	15.6	— 5.9	.1	— 5.8
Audi	19.1	20.3	4.6	1.5	6.1
Peugeot	17.5	19.1	9.7	.1	9.8
Saab	19.2	21.4	24.8	—13.3	11.5
Mercedes	11.4	12.8	14.8	— 2.5	12.3
BMW	17.5	14.8	—11.7	— 3.7	—15.4
All	**12.1**	**13.6**	**13.5**	**1.1**	**12.4**

EPA Says 1975 Cars Use 13.5 Percent Less Fuel

Americans may be paying more for their 1975 automobiles, but they will get at least some of the added expense back in the form of lower fuel usage, according to the Environmental Protection Agency.

Overall, the new 1975 automobiles will get 13.5 percent better fuel economy industry-wide due to changes in emission control and engine systems than 1974 automobiles, according to EPA. The 13.5 percent figure is based on data from all cars that were certified by EPA as meeting the federal emission standards as of September 15.

Although a number of smaller-volume manufacturers remain to be certified for 1975, in excess of 95 percent of the vehicles expected to be sold in 1975 were covered by certificates as of September 15, and any additional data from the remaining cars cannot change the average fuel economy improvement by much.

The EPA fuel economy road tests once again rated foreign-made cars, whose manufacturers have historically been more fuel-conscious because of long-standing high prices abroad, at the top of the list.

Best ratings for U.S. cars were 13th in city driving by the four-cylinder Chevrolet Vega (140 cu. in.) and 17th in highway mileage by the six-cylinder American Motors' Gremlin (258 cu. in.).

Despite the figures, and despite the continuing crisis most American car buyers this year are expected to once again purchase domestic-made cars. For that reason, *Commerce Today* lists on the opposite page the top 50 U.S. models in terms of fuel economy, as well as a table (above) comparing the performance to 1974 levels by manufacturer and total fleet (sales weighted averages).

Most domestic and foreign car manufacturers have agreed to participate in the voluntary fuel economy labeling program and to label each new car with the miles per gallon information supplied by the Environmental Protection Agency. The label will be attached to a rear side window, like the price sticker.

The auto makers have a choice of label types: one giving an average rating for that car line and engine; one giving a range as well as the estimated average; one listing all figures for a car line, with that model underlined or circled; and one specifying figures for a car taking into consideration other options as well: automatic or manual transmission; axle ratio; and weight.

The "1975 Gas Mileage Guide for New Car Buyers," containing the fuel economy information, covers all passenger cars for sale in the United States. Cars intended for sale in California will be listed in a separate guide, because California's emission requirements are different than the federal standards that apply elsewhere. California cars are certified separately.

The California fuel economy information and that for all trucks will be available in a few weeks. Single copies of the "1975 Gas Mileage Guide for New Car Buyers" are available from the Consumer Information Center, Pueblo, Colorado 81009. Bulk copies available from: Fuel Economy, Fedederal Energy Administration, Washington, D.C. 20461 (202-634-7610).

Lowest Energy Users

	Miles per Gallon Highway	City	Engine Size (Cubic Inch)	Six Cylinders	Carburetor Barrels or Fuel Injection
American Motors Gremlin	30	21	258	6	1
Chevrolet Vega*	29	22	140	4	2
Pontiac Astre and Astre Wagon*	29	21	140	4	2
Chevrolet Vega Kammback*	29	21	140	4	2
Chevrolet Monza*	29	21	140	4	2
Chevrolet Vega & Vega Kammback*	28	19	140	4	1
Pontiac Astre & Astre Wagon*	28	19	140	4	1
Ford Pinto & Pinto Wagon	26	18	140 (2.3L)	4	2
Ford Mustang II	26	18	140 (2.3L)	4	2
Buick Skyhawk*	25	19	231	6	2
Oldsmobile Starfire*	25	19	231	6	2
American Motors Hornet & Hornet Wagon	25	17	258	6	1
American Motors Gremlin	24	19	232	6	1
Buick Skylark & Century/Regal*	24	16	231	6	2
American Motors Hornet & Hornet Wagon	24	18	232	6	1
Plymouth Valiant/Duster*	23	18	225	6	1
Dodge Dart*	23	17	225	6	1
Chevrolet Monza*	23	15	262	8	2
Plymouth Road Runner/Fury	22	13	360	8	2
Chrysler Cordoba*	22	13	360	8	2
Dodge Coronet/Charger*	22	13	360	8	2
Ford Pinto*	22	16	171 (2.8L)	6	2
Ford Mustang II*	22	15	171 (2.8L)	6	2
Ford Pinto Wagon*	22	15	171 (2.8L)	6	2
Buick Apollo*	21	16	250	6	1
Pontiac Lemans*	21	16	250	6	1
Chevrolet Chevelle*	21	16	250	6	1
Oldsmobile Omega*	21	16	250	6	1
Chevrolet Camaro*	21	16	250	6	1
Pontiac Firebird*	21	16	250	6	1
Chevrolet Nova*	21	16	250	6	1
Oldsmobile Cutlass*	21	16	250	6	1
Pontiac Ventura*	21	16	250	6	1
Ford Maverick*	21	16	250	6	1
Lincoln-Mercury Comet*	21	16	250	6	1
American Motors Matador*	21	15	258	6	1
Ford Granada*	20	15	250	6	1
Lincoln-Mercury Monarch*	20	15	250	6	1
Dodge Dart*	20	13	318	8	2
Plymouth Valiant/Duster	20	13	318	8	2
Chevrolet Camaro*	20	13	350	8	4
Chevrolet Corvette*	20	13	350	8	4
Chevrolet Nova*	20	13	350	8	4
Oldsmobile Cutlass*	20	15	350	8	4
Buick Century/Regal*	20	13	350	8	4
Pontiac Ventura*	19	14	350	8	2
Buick Apollo/Skylark*	19	14	350	8	2
Oldsmobile Omega*	19	14	350	6	2
American Motors Matador & Matador Wagon	19	16	258	8	1
American Motors Hornet*	19	14	304	8	2

* Catalyst equipped

U.S. Wives Expect Still Fewer Babies

The population explosion which is causing such worldwide concern continues to act like a dud in the United States.

A nationwide Census Bureau survey of wives between 18 to 39 conducted in June showed that they expected to have a total of 2,550 children per 1,000 women in their lifetimes, which means about 2.6 children per woman.

A similar survey a year earlier showed that wives in the same age group expected a total of 2,638 children per 1,000 wives. In 1967, expectations were considerably greater: wives 18 to 39 expected 3,118 children per 1,000 women, or 3.1 children per woman.

Bureau population officials calculated that the difference between 1973 and 1974 expectations would result in about 3 million fewer births among women 18 to 39 if the survey results were applied to women still unmarried.

Survey results in both 1973 and 1974 showed that younger women expect fewer children than those 30 years and over. In 1974, the 18-24-year-old group expected to have, in all, 2,165 children per 1,000 wives (about 2.2 per woman) compared with 2,896 expected by women 30 to 39 years (about 2.9 per woman). A year earlier, the younger women said they expected 2,261 children per 1,000 wives and the older women, 3,009 children per 1,000.

The 1974 survey indicates a continuing correlation between schooling and birth expectations: women with college educations expect to have fewer children than those with grammar or high school educations. However, among younger women, 18 to 24 years, the gap between those with higher education and those with less schooling is narrower than among women in their 30's. Among younger women, the gap is only two- to three-tenths of a child per woman. Among women in the 30's, the gap is about one child per woman.

Black women expect to have more children than white women with the exception of the group 18 to 24 years where there is no significant difference in expectations between the races.

Unit Helps States Plan To Cushion Economic Shock Of Reduced Rail Service

A Commerce Department grant will help an agency of the state governments plan long-range economic growth in rural areas facing reduced rail service.

The Council of State Governments, with offices in Lexington, Kentucky, applied for the $150,000 grant from Commerce's Economic Development Administration.

The Council anticipates sections of the northeast and midwest will have reduced rail service in connection with the reorganization of several railroads. It also anticipates reductions in rail service in other rural areas of the nation.

The grant will help pay the administrative costs of a task force to study the effects of such railroad service curtailments.

Council officials said the task force will seek alternative methods of meeting transportation requirements of the economies of the affected areas. The studies will consider farm-to-market roads, revised tax schedules to encourage railroads to continue operation, and direct subsidies for selected routes.

Findings from the study will be made available to state officials assigned the task of developing transportation programs to support economic growth.

The study will place special emphasis on Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Ohio, Indiana, Illinois, Michigan, Virginia and West Virginia, and portions of Kentucky, Missouri and Wisconsin.

Plan Proposed To Rehabilitate, Expand Nation's Marine Fisheries

A program is under way to button together in one extensive package a plan to rehabilitate and expand the nation's multi-billion-dollar marine fishing resources, which in some cases have been severely depleted by the heavy fishing of foreign fleets, and habitat pollution and destruction.

Preparation of the plan was recommended by the President's National Advisory Committee on Oceans and Atmosphere. The task is being carried out by the National Marine Fisheries Service, an arm of Commerce's National Oceanic and Atmospheric Administration.

A 225-page draft outline of the plan has been completed by a task force, and is being used as a basis for reviewing the needs and problems of the nation's fisheries with people in and out of government.

Using the draft outline, the NMFS will seek information and suggestions from fishermen, vessel owners, processors, state fisheries' managers, marine recreational fishermen, conservationists, scientific organizations, trade groups, consumers, and others. For this purpose, a series of meetings will be held between now and January in many fishing communities along the nation's coasts. The input produced at the meetings will be used to develop the ideas in the draft outline in a broad National Fisheries Plan which will recommend legislation and other actions.

In addition, the Atlantic States, Gulf States, and Pacific Fisheries Commissions are preparing to conduct intensive reviews of the marine fisheries problem with their respective constituencies to gather suggestions as to what should be done complementary to the NMFS effort, to strengthen the nation's fisheries.

The primary problem facing U.S. marine fisheries is that more and increasingly efficient fishing fleets, especially foreign fleets, and a growing number of fishermen are attacking declining stocks of fish, particularly of certain species.

It has been estimated that the potential yield of the waters off the U.S. coasts is 40.7 billion pounds (18.5 million metric tons) of fish, more than eight times the present U.S. catch, although it is unlikely that all of this could be harvested economically.

The NMFS draft outline says that fish harvested off the U.S. coasts increased from about 4.4 billion pounds in 1948 to about 11.2 billion pounds in 1972. Almost all this additional catch, the report explains, has gone to foreign fishermen in their worldwide search for further protein supplies. The growth in U.S. consumption has therefore been supplied by imports. This multiplying fishing pressure and the lack of effective management has resulted in overfishing of several important species.

Some distant water fleets employ a "pulse fishing" technique. This means fishing intensively on a given stock until it is drastically reduced, and then leaving the fishery to rebuild for a number of years before returning to fish it again. While there may be disagreement as to whether this leads to permanent damage, it is clearly to the disadvantage of the coastal fisheries whose fleets are left with what are at least temporarily depleted stocks, the report notes.

Examples of fishery stocks severely depleted by overfishing and lack of management include: the California sardine fishery, which reached a peak of 1.5 billion pounds in 1936 and ceased to exist effectively by 1962; U.S. haddock catches, which under the impact of foreign fishing dropped from 134 million pounds in 1966 to 26.8 million pounds in 1970; the yellowfin sole in the Bering Sea, rapidly depleted by intensive fishing.

Pollution threat

Overfishing is not the only threat to fishery stocks. Widespread losses of fish and shellfish stocks are occurring due to pollution and physical changes in estuaries and rivers. Solutions to this problem should focus upon influencing environmental decision-making processes.

Aside from overfishing, the report explains, other problems include damage to the gear of U.S. fishermen from foreign fishing, damage to nursery stocks of fish not sought but important to the U.S. fleet, and management difficulties.

Present management of the fisheries lies mainly with states whose policies, interests, and authorities often differ, resulting at times in conflicting and inefficient regulations. Moreover, the role of state and federal governments in management beyond the territorial seas has not been clearly defined, leading in some cases to a management vacuum.

The continuing growth in recreational fishing increases the conflicts between recreational and commercial interests and with it the need for better mechanisms to allocate resources equitably between the two.

In 1970, recreational fishermen caught more than 666 million fish estimated to weigh 1.58 billion pounds, almost equal to one-third of the U.S. commercial catch in the same year.

A redefinition of management responsibility and authority, and major improvements in management methods are needed.

With the exception of a few fisheries, U.S. landings of most fish species have remained static or declined in recent years. Yet thanks to imports, principally of tuna, shrimp and groundfish, fish products consumed in the U.S. jumped from 3.1 billion

'Project Headstart' For Oceanographers

Delaware students, and eventually those from all over the country, are becoming more aware of man's dependence on the ocean through a program sponsored by Commerce's National Oceanic and Atmospheric Administration.

The University of Delaware has used a NOAA Sea Grant to prepare a Marine Environmental Curriculum now being employed in 30 Delaware schools. Sea Grant projects in nine other states have purchased the curriculum sets, which are designed to relate specific problems of the marine environment to general fields of knowledge.

Each set consists of a collection of 65 "learning experience" folders, or packets of teaching materials. Each folder deals with a specific topic for teaching, along with reference materials. Where appropriate, such aids as discussion outlines, laboratory experiments, suggested field trips, tests, and visual aids are included.

Each of the folders is built around a single subject showing some aspect of ocean-atmosphere-land interaction. Concepts and lesson plans are keyed to subjects studied from kindergarten through twelfth grade, and encompass general science, biology, chemistry, earth science, mathematics, social studies, reading, art, language arts, and even home economics.

The overall theme emphasizes that ocean-atmosphere-land relationships are critical and that improved knowledge of the marine environment is required for intelligent decision-making about environmental problems.

"One purpose of the study," says Delaware's Dr. Stegner, who directed the project, "is to interweave throughout a student's school career an awareness of how important the oceans are to life, through lessons that supplement rather than displace regular courses of study."

The Sea Grant packets contain extensive visual material including slides and masters for making transparencies. Examples from the Delaware region are frequently used, but the lessons can be adapted to school systems throughout the United States.

pounds in 1948 to seven billion pounds in 1973.

The report estimates that, under present conditions, consumption of fish products in the United States could increase to ten billion pounds a year by 1985.

To deal with this situation, the NMFS preliminary fisheries plan presents a massive network of proposals on a vast array of issues, nearly all of them interspersed with a number of options.

Particular attention must be paid to solving the common property dilemma of fisheries; that is, the unlimited competition for fish which leads to catches too small or too irregular for profit or pleasure. Without answers to this problem, the report states, few restorative measures can ultimately be successful.

To accomplish this, the report calls for a reconsideration and modification of the way we manage and support fisheries, in order to: restore and conserve resources of interest to the United States; protect and manage U.S. resources under extended jurisdiction; overcome contradictory, inconsistent, inadequate and inequitable laws and regulations; provide for growing recreational needs; overcome the common property problems through limiting entry; provide assistance to rebuild deteriorated fishing fleets and facilities and to operate them efficiently and profitably, and develop commercial aquaculture as an alternative means of increasing supplies of some fisheries products.

A major objective will be achieving equitable and effective international agreements. The world community, the report explains, is moving toward a system of extended coastal state jurisdiction over fisheries within a 200-nautical mile belt of water adjacent to the coast.

This new system, the report says, would eliminate the concept of freedom of fishing for foreign vessels in the zone from 12 to 200 miles offshore, a basic form of the existing legal system. Such extended jurisdiction is likely to allow access to fisheries within the zone for foreign vessels to the extent that stocks are not fully utilized by a coastal state.

Major U.S. fisheries, especially salmon, shrimp, and tuna, are likely to be adversely affected by the proposed 200-mile regime unless there are adequate internationally-agreed provisions to protect them, according to the report.

For instance, salmon, a species that spawns in streams and ranges as far as 1500 miles out to sea, would require adequate U.S. influence over foreign fishing beyond the proposed 200-mile zone.

An attempt among most of the nations of the globe to agree upon a comprehensive Law of the Sea Treaty covering fisheries and other ocean problems will be made at Geneva in a session scheduled to begin next March 17.

Meetings Will Get Public Input On Data Needed From 1980 Census

Open public meetings are being planned by community organizations in about 60 U.S. cities to involve the public closely in getting ready for the 1980 Census of Population and Housing.

These conferences will be aimed at getting suggestions from users and potential users of census data to improve the 1980 census. The first meeting will be held October 30 at the New Orleans Chamber of Commerce. The entire series is expected to continue into mid-1975.

The meetings are being organized and conducted by local community and business and professional organizations in cooperation with Commerce's Census Bureau.

They will enable the Bureau to inform data users about current thinking within the Bureau regarding the 1980 census, but more importantly, the meetings will provide local businessmen and other private citizens with an opportunity to tell the Bureau about their needs for information that might be collected in the decennial census.

Census results, over the years, have enormous influence on local leaders and community planners. Following the 1960 and 1970 censuses, local users indicated the importance of such data to their communities by making thousands of direct requests for statistics to the Bureau.

Meetings are tentatively planned in Albany, N.Y., Albuquerque, Atlanta, Baltimore, Billings, Birmingham, Boise, Boston, Burlington, Vt., Charleston, W.Va., Charlotte, Chicago, Cincinnati, Cleveland, Columbia, S.C., Dallas, Denver, Des Moines, Detroit, Fargo and Fresno.

Meetings may also be held in Harrisburg, Houston, Indianapolis, Jackson, Kansas City, Las Vegas, Lewiston, Me., Little Rock, Los Angeles, Louisville, Madison, Manchester, N.H., Miami, Milwaukee, Minneapolis-St. Paul, Nashville, New Haven, New Orleans, New York, Oklahoma City and Omaha.

Other cities which may host conferences include Philadelphia, Phoenix, Pittsburgh, Portland, Ore., Providence, Racine, Raleigh, Richmond, Sacramento, Salt Lake City, San Diego, San Francisco, Sioux Falls, St. Louis, Seattle, Syracuse, Tallahassee, Tulsa, Washington, D.C. and Wichita.

Winners Please Note

Look like a winner by being a WINner! Businessmen can display their inflation-fighting ardor by joining President Ford in sporting WIN (Whip Inflation Now) buttons on their lapels. Scheduled to be available by early November, up to four free buttons per family can be ordered from the Citizens Action Committee, Room 3204, New Executive Office Bldg., Washington, D.C. 20500. A nominal charge will be required for larger quantities.

In Turnaround, U.S. Is Net Importer Of Nitrogenous Fertilizer

The United States continued to be a net importer of nitrogenous fertilizers in July, the first month of the 1975 crop year, extending the trend established in early 1974.

U.S. imports of nitrogenous fertilizers were 99,726 content tons in July, compared with 44,726 tons in July 1973. Exports were 96,930 content tons in July 1974, compared with 140,775 in July 1973.

In addition, Commerce Department figures suggest that exports of nitrogenous fertilizers for the second half of 1974 will be lower than during the same months of 1973. Export contracts reported to the Department's Office of Export Administration listed a total of 457,069 content tons of nitrogen under contract for delivery in August-December 1974. Combined with July exports, this totals 553,999 content tons, while Census Bureau figures for the like period of the previous crop year showed actual exports of 744,799 tons nitrogen content.

Statistics compiled by Commerce's Bureau of Domestic Commerce also showed that exports of phosphatic fertilizer rose to 185,465 tons (P_2O_5 content) in July, from 151,428 tons (P_2O_5 content) in July 1973, while imports rose to 23,368 tons content from 9,825 tons content in July 1973.

Production of anhydrous ammonia, chief source of nitrogenous fertilizer, rose 4.7 percent to 15,764,000 tons in the 1974 crop year.

Bureau of the Census figures indicate the inventories of fertilizer materials were at lower-than-normal levels at the end of June.

A table of prices indicates that nitrogenous materials have risen by 86 to 143 percent since October 24, 1973, the day they were decontrolled by the Cost of Living Council. Prices for the various phosphatic fertilizers rose by 110 to 127 percent while phosphate rock (the basic raw material for phosphatic fertilizers) rose 257 percent in the same period.

Retail prices of the different nitrogenous fertilizer material rose 109 to 146 percent from October 25, 1973, to September 15 of this year, while retail phosphatic prices rose by 85 to 91 percent and potash (potassium chloride) rose 51 percent and mixed fertilizers increased 80 percent.

Trade Mission Seen Promoting Growth Of US-USSR Tourism

Ways to increase the two-way flow of tourism between the Soviet Union and the United States were discussed during a special U.S. trade mission to Russia in late September.

Eleven U.S. tourism industry leaders participated in the mission, which was led by C. Langhorne Washburn, Assistant Secretary of Commerce for Tourism and Director of the United States Travel Service. They met with a group of Soviet officials headed by Sergei S. Nikitin, Chairman, State Administration for Foreign Tourism of the Council of Ministers of the USSR.

During their stay, the members of the U.S. mission visited Moscow, Leningrad, Kiev and Tbilisi to study present and projected tourist facilities, including hotels and other resources.

The meeting of top-level travel officials resulted in "a constructive and valuable exchange of views on a wide range of questions involved in the development of two-way tourism," according to Assistant Secretary Washburn. All parties agreed on the importance of establishing and promoting even closer and more efficient cooperation among their official tourist organizations and private travel companies.

Possible participation by U.S. companies in the financing and construction of hotels in the USSR was discussed. Participants in the meeting agreed on the desirability of appointing a Soviet-U.S. working group within the framework of the US-USSR Trade and Economic Council, for consideration of future questions regarding tourism between the two countries.

Continued collaboration

The U.S. tourism mission invited the Soviet leaders and specialists in the field of tourism to pay a return visit to the United States in early 1975 to continue the collaboration set in motion at the Moscow meeting. The representatives of both countries agreed on the need to continue to promote through all media the development of two-way travel with higher traffic targets, to familiarize citizens of both countries with the national ways of life and achievements of the other.

In addition to Washburn, U.S. participants include Paul Sheeline, Chairman of the Board of Intercontinental Hotels; Curt Strand, President of Hilton International; Peter Ueberroth, President of Tour Consultants, Inc.; and William Walton, Vice Chairman of the Board for Holiday Inns of America.

Others were Charles Draney, a director of Bechtel Corp.; J. Willard Marriott, Jr., President of the Marriott Corp.; Robert McMullen, President of the American Society of Travel Agents; and Harold B. Scott, President of the US-USSR Trade and Economic Council; James A. Henderson, Executive Vice President of American Express, and Dan Colussy, Senior Vice President for Passenger Marketing, Pan American World Airways.

Also participating were Lewis Bowden, Acting Deputy Assistant Secretary for East-West Trade, U.S. Department of Commerce; Cordell Hull, Managing Director of Amex International Ltd.; Peter J. H. Pattinson, Vice President for Commercial Operation, Bechtel Corp.; John T. Connor, Jr., Senior Vice President, US-USSR Trade & Economic Council; Cord Hansen-Sturm, Assistant to the Chairman, American Express Company, and William D. Patterson, Consultant for American Express Company.

Calendar For Businessmen

Oct. 30—Syracuse — Metrication Seminar for executives, Onandoga War Memorial. Sponsors: Commerce's New York District Office, other organizations and educational institutions. For information, 212-264-0621.

Oct. 31—Binghamton, N.Y.—Metrication Seminar for executives, State University of New York at Binghamton. Sponsors: Commerce's New York District Office, other organizations and educational institutions. For information, 212-264-0621.

Nov. 6-7—Chicago—Metrics in Manufacturing seminar, Sheraton-Chicago Hotel. For information, Special Programs, Society of Manufacturing Engineers, 20501 Ford Road, Dearborn, Mich. 48128. (313-271-1500 x40 or 88.)

Nov. 7-8—Gaithersburg, Md.—Mechanical Failures Prevention Group conference, National Bureau of Standards. Sponsors: MFPG, NBS. For information, Harry Burnett, NBS. (301-921-2805.)

Nov. 7-8—Milwaukee—Regional Operations & Automation Workshop, Pfister Hotel & Tower. Sponsor: The American Bankers Assn. For information, ABA, 1120 Connecticut Ave. NW., Washington, D.C. 20036. (202-467-4322.)

Nov. 11-12 — New York — First National Plastics Bottles and Jars Conference, Roosevelt Hotel. Sponsor: New York University. For information, Ms. Sandy Padrick, New York Management Center, 360 Lexington Ave., New York, N.Y. 10017. (212-953-7269.)

Nov. 11-14—Albuquerque—Area/Industry Conference, Albuquerque Hilton. Sponsor: Industrial Development Research Council. For information, IDRC, 1054 Airport Road, Atlanta, Ga. 30341. (404-458-6026.)

Nov. 11-15—New York—Petroleum Tankship Operations course, World Trade Institute. For information, Registrar, World Trade Institute, One World Trade Center, 55th Floor, New York, N.Y. 10048. (212-466-4044.)

Nov. 11-15—Chicago—Extrusion Principles & Practices seminar, Ambassador Hotel. Sponsor: New York University. For information, Ms. Sandy Padrick, Dept. 14NR, 360 Lexington Ave., New York, N.Y. 10017.

Nov. 11-15—San Diego—Fundamentals of Plastics seminar, Kona Kai Club and Inn. Sponsor: New York University. For information, Ms. Sandy Padrick, Dept. 14NR, 360 Lexington Ave., New York, N.Y. 10017.

Nov. 12-14 — Schiller Park, Ill. — Process Planning for Manufacturing clinic, Sheraton Inn-O'Hare South. For information, Special Programs, Society of Manufacturing Engineers, 20501 Ford Road, Dearborn, Mich. 48128. (313-271-1500 x40 or 88.)

Nov. 12-14—Chicago, Ill.—ASSEMBLEX Conference and Exposition, Arlington Park. For information, ASSEMBLEX, Society of Manufacturing Engineers, 20501 Ford Road, Dearborn, Mich. 48128. (313-271-1500 x40 or 88.)

Nov. 13—Cleveland — 1972 Economic Censuses user conference. For information, Commerce Cleveland District Office.

Nov. 13-15—New York—Workshop on Year-end Tax Planning, Subpart F, World Trade Institute. For information, Registrar, World Trade Institute, One World Trade Center, 55th Floor, New York, N.Y. 10048. (212-466-4044.)

Nov. 14—Cincinnati—1972 Economic Censuses user conference. For information, Commerce Cincinnati District Office.

Nov. 14—Memphis—Twelfth annual Business Outlook Conference, Memphis State U. Sponsor: Memphis State's Bureau of Business and Economic Research.

Nov. 17-21 — Mayaguez, P.R. — Fourth Food-Drug From The Sea Conference, Univ. of Puerto Rico. Sponsor: Marine Technology Society. For information: MTS, 1730 M Street NW., Suite 412, Washington, D.C. 20036. (202-659-3251.)

U.S. Trade Position Lags In Principal World Markets, Gains In Smaller Nations

The value of imports by the principal U.S. trading partners continued to grow vigorously during the latest 12-month period for which data are available, generally through June or July 1974. Two-thirds of these nations expanded overall purchases of foreign goods by at least 40 percent, as indicated in the accompanying table. Similarly, imports from the United States rose strongly, but increases of that magnitude were less prevalent in this trade.

U.S. exporters improved or maintained their positions in half the markets, mostly the smaller developed and the developing areas. Among the ten largest markets, the U.S. share strengthened in only one. The U.S. performance was generally affected adversely by the huge rise in oil import bills but was benefited, although to a lesser extent, by the substantial increases in agricultural imports from this country.

Higher prices were mainly responsible for the rapid increase in import values in world markets. The widespread business slowdown resulted in comparatively modest gains in the volume of goods demanded from abroad. The sharp boost in the cost of petroleum, imposed by the organized oil producers during the past year, has begun to be reflected in the trade data. Recent returns for several of the larger traders indicate that petroleum is comprising a growing proportion of their total imports. Despite weakness in some commodities, prices of industrial and consumer goods moving internationally have generally increased further, particularly where production capacity had been strained. Moreover, crop shortages in various parts of the world have maintained pressure on prices of agricultural commodities.

To preserve continuity with previous reports in this series, the trade statistics used here are expressed in U.S. dollars by applying the exchange rates prevailing in each period to the national currency data for each country. Non-dollar reserve assets are treated in the same manner. As a result, changes based on dollar values are inflated (deflated) for countries whose currencies have appreciated (depreciated) relative to the dollar.

Although purchases of U.S. goods by the ten leading trading nations advanced sharply in value, those from other suppliers rose even more rapidly and the U.S. share declined in nearly every case. Only in Belgium did the United States enhance its standing; losses in Italy and Canada, however, were relatively modest.

U.S. gains in Belgium

The share improvement in Belgium resulted from a climb of nearly three-fifths in imports of U.S. products. The advance extended to a wide variety of goods, including soybeans, office machines, motor vehicle and tractor parts, and aircraft.

Italy and Japan likewise sharply stepped up their purchases of U.S. goods, the former by around 60 percent and the latter by almost half, but this country's standing, nevertheless, declined in both. In each, the rise in imports from the United States was led by corn, wheat, and soybeans. Italy also recorded higher arrivals of chemicals and silver; Japan, of coal, aircraft, and lumber.

Nonelectric machinery, especially office machines, contributed importantly to the substantially higher purchases of U.S. goods by the United Kingdom and France. In addition, British imports of U.S. chemicals, electric machinery, and foodstuffs posted notable gains, as did French receipts of tubes, transistors, and semiconductors. Partially offsetting these increases in France was the decrease in arrivals of aircraft. Despite the strong U.S. performance in the two markets, other suppliers posted even better records and this country's standing declined.

The U.S. share slipped in Canada too, despite greater imports of most automotive products. Arrivals of American coal, aircraft, and plastic materials were also boosted.

Germany's imports from all suppliers climbed by about one-third, while those from this country rose at a modestly slower pace. Purchases of U.S. soybeans, chemicals, aircraft, and electric equipment were especially strong.

Contrary to the pattern of share losses among the top ten traders, the United States improved its position in many of the smaller developed countries. In Australia, larger purchases of aircraft, chemicals, and nonelectric machinery, particularly mechanical handling equipment and power generating machinery, helped strengthen the U.S. position.

Increased imports of American agricultural commodities contributed to the U.S. gains in several other countries. Yugoslavia purchased more wheat and animal feedstuffs; Portugal, more wheat and corn as well as aircraft. In Spain, higher arrivals of corn, animal feedstuffs, and soybeans more than offset a decline in imports of aircraft. At the same time, the U.S. position also improved in Greece, Norway, and Finland.

Among the developing areas, this country's position advanced in Mexico as the rise in shipments from other suppliers fell short of the nearly one-half increase in those from the United States. Contributing most to the U.S. gain were corn, nonelectric machinery, and automotive parts and accessories.

The U.S. share also rose in several Far Eastern nations. In Taiwan, the gain was largely attributable to the greater inflow of wheat, soybeans, and nonelectric and electric machinery. Increased machinery imports, especially those of construction and mining equipment as well as tubes, transistors and semiconductors, in addition to aircraft, aided the U.S. advance in Singapore. In Hong Kong, cotton, rice, and plastics were the most important items helping to strengthen the U.S. position. On the other hand, in Korea, the U.S. standing weakened despite increased arrivals of wheat, rice, and cotton.

Reserves grow modestly

Official reserves of the leading trading countries shown in the table rose by only a small amount in the 12-month period ending June 30 to $155 billion. The slow

World Market Report

The 45 markets shown below accounted for 90% of 1973 imports into all free-world markets and 89% of imports from the United States.

Values in millions of dollars — Published quarterly

Importing country	1973 Imports			1974 Imports January through latest month				Import change in latest available 12-month period*		Reserves at end of second quarter	
	From world	From U.S.	U.S. share %	Latest month	From world	From U.S.	U.S. share %	From world %	From U.S. %	1973	1974
Germany, West	54,496	4,581	8.4	Aug.	45,335	3,620	8.0	+ 34	+ 27	32,253	34,225
United Kingdom	38,843	3,966	10.2	July	31,744	3,012	9.5	+ 49	+ 37	7,013	6,711
Japan	38,201	9,243	24.2	Aug.	41,343	8,219	19.9	+ 75	+ 49	15,199	13,428
France	37,400	3,089	8.2	July	31,080	2,423	7.8	+ 47	+ 36	11,592	8,168
Italy	27,718	2,298	8.3	May	16,321	1,229	7.5	+ 62	+ 59	5,988	5,285
Canada	24,817	16,943	68.3	Aug.	21,996	14,336	65.2	+ 34	+ 31	6,046	6,123
Netherlands	24,742	2,122	8.6	May	13,419	1,053	7.9	+ 47	+ 30	5,875	5,525
Belgium-Lux.	21,975	1,257	5.7	Mar.	6,284	442	7.0	+ 41	+ 58	5,057	4,627
Switzerland	11,677	737	6.3	July	8,428	549	6.5	+ 43	+ 32	8,222	8,413
Sweden	10,625	705	6.6	May	5,907	387	6.6	+ 43	+ 38	2,379	1,787
Spain	9,594	1,545	16.1	May	5,947	1,051	17.7	+ 57	+ 49	5,771	6,101
Denmark	7,711	515	6.7	July	5,525	330	6.0	+ 42	+ 21	1,165	798
Australia	7,654	1,718	[2]22.5	May	4,635	1,022	22.0	+ 71	+ 92	6,135	5,463
Austria	7,117	218	3.1	July	5,218	153	2.9	+ 35	+ 27	3,106	2,721
Brazil	6,855	1,895	27.6	——	—	—	—	+ 43	+ 41	6,019	6,406
Norway	6,238	386	6.2	July	4,712	381	8.1	+ 46	+ 89	1,579	1,627
Hong Kong	5,631	719	12.8	July	4,125	565	13.7	+ 53	+ 74	([1])	([1])
South Africa	5,181	839	16.2	Mar.	1,642	262	15.9	+ 38	+ 27	1,801	1,207
Singapore	5,065	765	15.1	June	4,114	538	13.1	+ 74	+ 79	1,176	[3]1,325
Yugoslavia	4,511	261	5.8	May	3,085	221	7.2	+ 62	+ 97	1,034	1,196
Korea, Rep.	4,240	1,202	28.3	June	3,275	843	25.7	+ 73	+ 64	902	1,045
Finland	4,207	198	4.7	June	3,113	169	5.4	+ 48	+ 52	583	749
Mexico	4,146	2,605	62.8	Jan.	437	287	65.7	+ 43	+ 48	1,233	[3]1,556
Taiwan	3,778	954	25.2	June	3,380	848	25.1	+ 93	+ 110	1,241	1,080
Greece	3,428	283	8.2	May	1,701	123	7.2	+ 44	+ 113	1,103	958
Iran	3,369	473	14.0	——	—	—	—	+ 40	+ 16	1,198	5,439
India	3,201	557	17.4	——	—	—	—	+ 43	+ 69	1,403	[4]1,439
Portugal	3,008	246	8.2	May	1,274	121	9.5	+ 58	+ 64	2,634	2,562
Israel	2,987	565	18.9	June	1,991	345	17.3	+ 46	+ 39	1,427	1,392
Ireland	2,789	192	6.9	Mar.	841	55	6.5	+ 34	+ 18	1,039	968
Indonesia	2,347	442	18.9	May	1,271	215	16.9	+ 55	+ 76	774	1,386
Argentina	[5]2,192	[5]484	[2]22.1	——	—	—	—	+ 15	+ 26	817	1,854
Turkey	2,099	185	8.8	May	1,369	168	12.2	+ 56	+ 34	1,827	2,170
Malaysia, West	2,087	171	8.2	——	—	—	—	+ 52	+ 40	[6]1,286	[6]1,508
Thailand	2,057	291	14.1	——	—	—	—	+ 39	+ 25	1,282	1,830
Nigeria	1,876	191	10.2	——	—	—	—	+ 25	+ 22	520	2,147
Philippines	1,767	501	[2]28.4	June	1,593	373	23.4	+ 81	+ 78	845	1,539
Morocco	1,101	118	10.7	Apr.	603	74	12.3	+ 65	+ 260	292	[3]229
Peru	1,026	306	29.9	——	—	—	—	+ 29	+ 28	479	[5]515
Pakistan	981	242	24.6	June	841	227	27.0	+ 73	+ 87	479	376
Trinidad, Tobago	778	123	15.9	Feb.	168	24	14.2	+ 11	— 7	48	97
Viet-Nam, Rep.	656	304	46.4	——	—	—	—	— 5	— 5	201	[7]190
Panama	489	172	35.2	——	—	—	—	+ 12	+ 13	1,212	[8]2,198
Costa Rica	455	160	35.1	——	—	—	—	+ 22	+ 30	36	35
El Salvador	[5]355	[5]104	[5]29.2	——	—	—	—	+ 28	+ 36	107	63

Note: The countries shown above include the 45 major importers of U.S. merchandise in 1973 for which current data are available. In order to present comparable statistics for all countries, import data have been adjusted from an f.o.b. to a c.i.f. valuation for Australia, Canada, Philippines, and Republic of South Africa. Reserves include official holdings of gold and foreign exchange, the gold tranche position, and Special Drawing Rights in the International Monetary Fund.

* Compared with preceding 12-month period.

[1] Not available. [2] End of March. [3] End of May. [4] End of April. [5] Estimated from partial year data. [6] Includes East Malaysia. [7] End of January. [8] End of December 1973.

Source: Official trade statistics of listed countries. International Monetary Fund, *International Financial Statistics.*

growth in these holdings that has been evident for some time is partly attributable to the absence of a higher dollar valuation of reserves of other major currencies which are no longer appreciating against the dollar. Moreover, with a few exceptions, these figures do not include the huge accumulation of reserve assets by the oil producing countries which are omitted from this report due to the lack of current trade data.

The shift of reserve assets toward the developing countries, especially the oil exporters, continued during the period under review. Holdings by developed nations fell by $6.6 billion while those of the developing countries as a group expanded by $10.7 billion. The major declines among the developed areas were recorded by France and Japan, while among the developing areas Iran; Nigeria, and Argentina recorded big gains. Among those not covered by this report, Saudi Arabia, Venezuela, Iraq, and Algeria also posted large increments to their reserves.

France reported the largest drop in reserves, $3.4 billion or about one-third of its holdings a year earlier. Losses occurred in all quarters except the second three months of 1974 and were especially sharp in the fourth quarter of last year when heavy repayments were made to other central banks for their earlier support of the franc.

The Japanese loss amounted to $1.8 billion despite a sizable gain in April-June 1974. Most of the decline took place in the final quarter of 1973 due to a weakened trade account, a worsened invisibles balance, and a massive deficit on long-term capital.

Italy also reported a sizable reduction in reserve holdings mainly in the second quarter of 1974 when official overseas borrowing failed to offset the current account deficit. At the same time, Australia, South Africa, and Sweden each experienced reserve losses of more than half a billion dollars.

In contrast, Iran posted the strongest advance in holdings during the period as increased oil revenues boosted the total by $4.2 billion. The sharp gains in reserves recorded by Nigeria and Indonesia were similarly influenced by higher petroleum earnings.

Germany, one of the few gainers among the developed countries, boosted its reserves by nearly $2 billion. The increase stemmed from its large, continuing trade surplus and foreign exchange operations in support of the currencies of certain European countries. A strong trade account also contributed importantly to Argentina's rise in holdings of about $1 billion.

This report is another in a quarterly series on major world import markets and the U.S. share of those markets, prepared by the Commerce Department's International Trade Analysis Staff.

WELCOME TO POLISH DELEGATION—*Arch N. Booth, President of the Chamber of Commerce of the United States, welcomes First Secretary Edward Gierek (right) and other Polish officials at the Chamber's Washington headquarters. Secretary of Commerce Dent (second right) spoke at this meeting, at which an agreement to form a U.S.-Polish Economic Council was signed.*

Gierek Visit Boosts Prospects Of $2 Billion In Polish Trade

Poland's strong desire for broader and closer cooperation with the U.S., especially in economic relations, was apparent during the official visit this month of Edward Gierek, the Polish chief of state.

Gierek noted with satisfaction that the U.S. has now moved to third place, behind West Germany and the United Kingdom, among Poland's Western trading partners. He said during his meetings with U.S. officials that the discussions could open a new phase in Polish-U.S. relations, and intimated that Poland conceives of the U.S. as becoming its leading trading partner in the West.

Reaffirmation of such high goals for bilateral trade and agreements to establish organizational bodies for expanded economic cooperation were prominent features of the visit. This first meeting of President Ford with an East European national leader also resulted in the issuance of joint statements on principles of U.S.-Polish relations, the development of economic, industrial and technological cooperation, and the development of long-term agricultural trade.

The two leaders anticipate that bilateral trade may reach $1 billion in 1976 and grow to $2 billion by 1980. In order that these goals may be achieved, they will seek to insure the existence of proper conditions for the expansion of economic relations. Fields offering particular opportunities for expansion include various light industries, food processing, chemical and petrochemical industry, construction and transportation equipment, machinery, electronic and electrical equipment industries, coal mining and utilization, and nonferrous metallurgy.

President Ford and the Polish leader pledged to facilitate cooperation between American firms and Polish economic organizations, consistent with applicable laws and regulations of each of the two countries, including long-term production arrangements, construction of new facilities, as well as expansion and modernization of existing facilities.

Evaluating positively the work to date of the Joint Trade Commission in developing and coordinating action in the area of economic and trade relations, the two leaders pledged to continue to work through the Commission to promote further economic cooperation and to resolve administrative, tax, visa, customs, and other problems which may arise; they will also facilitate as appropriate access to information concerning actual and potential markets, operation of business offices, and trade promotion efforts.

Agreements signed

Under provisions of the Joint Statement on Development of Agricultural Trade, the two countries agreed to form a permanent working group within the framework of the Joint Trade Commission to exchange views on economic and trade matters and to explore areas for possible cooperation in various fields of agriculture.

The following specific agreements were signed in Washington during the visit:

- Joint Funding of Scientific and Technical Cooperation, and establishment of a Joint U.S.-Polish Board to determine the broad areas of research to be financed by the Fund;
- Cooperation in Coal Research, with particular emphasis on coal utilization and extraction;
- Income Tax Convention, providing for non-discriminatory tax treatment and for administrative cooperation;
- Cooperation in the Field of Health, establishing a Joint Committee to determine the mechanism and policy for the program under the Agreement;
- Cooperation in the Field of Environmental Protection, implementing a more general accord signed in 1972.

In addition, an agreement between the U.S. and Polish Chambers of Commerce provides for the formation of a U.S.-Polish Economic Council. The Council will seek to develop solutions to problems experienced by either party in doing business with the other.

Gierek, whose title is First Secretary of the Central Committee of the Polish United Workers Party, met in Washington with the Secretaries of State, Commerce, HEW, the President of the Eximbank, members of Congress, prominent businessmen, and members of the press. Following his stay in Washington, he visited New York, Pittsburgh, and Houston and met with U.N. officials, commercial bankers and business executives. During the visit, he toured a coal mine and a petroleum refinery.

U.S. Businessmen, Financiers Urged To Join Ventures

Poland's chief of state declared to American businessmen that the goals set by the U.S. and Poland for bilateral trade—from $700 million now to $1 billion by 1976 and $2 billion by 1980—are actually minimal "from the point of view of realistic possibilities."

Speaking at a luncheon at the Chase Manhattan Bank in New York, First Secretary Edward Gierek told of Polish plans to accelerate both agricultural and industrial production, and how trade with the U.S. would fit into those plans.

"A major part of our mutual trade will be accounted for by Polish purchases of investment (capital) goods in the United States," he declared. "We have worked out a concrete program of effecting such purchases in the next five-year period, estimated at a value of nearly $1.5 billion, that is, about $250 million per annum. That is the minimum program already incorporated into our development plans, which we will carry out by buying in other countries if not in the United States. Conditions per-

mitting, this program can and should be expanded considerably."

Gierek explained: "When we speak of conditions, we primarily mean finance and cooperation opportunities. I will put it quite openly—the size of our investment (capital goods) transactions in the United States depends on credit opportunities. Thus, although Eximbank credits have no doubt been helpful to us, yet they have not resolved all our problems. We would therefore hope for a much greater involvement of credits from leading American private banks. Indeed, some progress can already be noted in this field, and new serious talks are under way. I trust they will prove fruitful and their results mutually beneficial."

The Polish leader said that his nation views cooperation in industrial ventures as one of the major factors for further development of U.S.-Polish economic relations, and commented: "We are glad to note that there is serious interest in such cooperation with Poland on the part of leading American firms. In fact, they have already given first and fruitful evidence of that interest, to mention only our cooperation with the great company of Mr. McCormick (International Harvester), cooperation which we indeed value highly. Talks on cooperation in industry are well advanced with other major American firms."

Gierek noted: "I have often been asked about the forms of co-production and about economic cooperation with the United States. Here, I should like to say that we are indeed prepared to consider various forms of cooperation in industry, as well as in joint trade-promotion that would include third markets. Poland's legislation provides for a broad framework for these kinds of ventures and there is no need to introduce any new laws. We are approaching these matters in a pragmatic

Joint Statement By President Ford, Polish Leader

The substantive section of the joint statement on economic, industrial and technological cooperation issued by President Ford and First Secretary Gierek after their discussions in Washington follows:

The President and the First Secretary expressed gratification with the results achieved in their mutual economic and trade relations in recent years. They endorsed the guidelines for their further development that are set forth in this Joint Statement, and affirmed the positive role of these guidelines for the further development of mutual economic, industrial, and technological cooperation between the United States of America and the Polish People's Republic.

Recognizing further growth of international trade as fundamental to economic development and improved standards of living, and guided by the provisions contained in the Joint Statement on Principles of United States-Polish Relations, they reaffirmed their determination to seek continued expansion of economic and trade relations pursuant to a liberal export and import policy consistent with the legal requirements of each country and with the principles of the General Agreement on Tariffs and Trade, including Most-Favored-Nation treatment. They also expressed confidence that their two countries' bilateral trade relations would be strengthened by the participation of their countries in the multilateral trade negotiations.

They recognize the existence of favorable prospects for further rapid development of bilateral trade in the coming years. They anticipate that their trade may reach $1 billion in 1976 and grow to $2 billion by 1980. They will seek to ensure the existence of proper conditions for economic relations in order that these goals may be achieved. Fields offering particular opportunities for the development of their economic relations include various light industries, food-processing, chemical and petrochemical industry, construction and transportation equipment, machinery, electronic and electrical equipment industries, coal mining and utilization and nonferrous metallurgy.

Considering industrial cooperation as a particularly important factor in the development of trade and the diversification of its structure, the President and the First Secretary will facilitate cooperation between American firms and Polish enterprises and economic organizations consistent with applicable laws and regulations of each of the two countries, including long-term understandings in production; construction of new industrial facilities, as well as expansion and modernization of existing facilities; technological cooperation and research including exchanges of know-how, licenses and patents; training and exchange of technicians and specialists; organization of exhibits and conferences; and market and management research; in both countries and in third countries.

They affirmed that favorable consideration should also be given to new forms and methods of industrial cooperation suggested by interested firms and organizations. With a view to the development of economic cooperation, they will examine ways and means for the application of customs and fiscal facilitation for goods assigned to, and resulting from, cooperation projects within the provisions of customs legislation in force in the two countries.

Positively evaluating the development to date of scientific and technological cooperation between the United States and Poland, including cooperative projects undertaken in accordance with the United States-Polish Agreement on Science and Technology, the President and the First Secretary expressed the view that further cooperation of this kind in fields of interest to both countries should be pursued.

With a view toward the facilitation of projects for industrial and agricultural development, they, by mutual agreement, will exchange information concerning various fields in which the expansion of industrial and technological cooperation is desirable, and, on the basis of such exchange, will examine areas appropriate for consideration.

They positively evaluated the development to date of mutual financial and credit relations, especially the cooperation between the Export-Import Bank of the United States and the Bank Handlowy in Warsaw, which contributed to the rapid rise of trade and economic cooperation, and pledged continued cooperation in the development of these relations.

Attaching great meaning to the progress achieved in creating reciprocal trade facilities, they will examine ways of resolving administrative, tax, visa, and customs problems which may arise, and will facilitate as appropriate access to information concerning actual and potential markets, operation of business offices, trade promotion and other endeavors which contribute to the development of trade and economic cooperation.

Evaluating positively the work to date of the Joint American-Polish Trade Commission in developing and coordinating action in the area of mutual economic and trade relations, they will continue to work through the Commission to promote economic cooperation and resolve problems arising in the course of their economic, industrial and technological cooperation.

In issuing this Joint Statement, they express the hope that it will become an important practical contribution to utilization of the potential for development of economic, industrial, and scientific and technological cooperation between the United States of America and the Polish People's Republic.

way, aware both of the real advantages that individual projects can produce and the specific requirements for their implementation. We shall always be ready to give serious consideration to any serious proposal."

Turning to specific fields of cooperation and "co-production" he said that a first priority would be in mining, where he mentioned Poland's considerable deposits of copper, together with opportunities in coal and in organic chemistry.

"Poland's present annual production of hard coal is nearly 170 million tons, and we rank second only to the U.S. as the world's major coal exporter. In addition, we have huge, so far unexploited deposits of high-quality coal, only recently discovered and prospected. We would be interested in starting exploitation of these new coal resources. Given proper credit terms, we would be in a position to ensure close cooperation with America in supplying Western Europe with coal, which would substantially reduce transportation costs and thus bring considerable savings to interested American firms.

"Likewise we are greatly interested in developing organic chemistry, especially with regard to gasification and liquefaction of coal. We know that large-scale research and technological work is under way in this country. We, on our part, are also working on this problem. The agreement signed the other day in Washington between our ministry and the U.S. Department of the Interior will greatly facilitate broader cooperation."

Conference On Asian Markets Set For Washington This Fall

A conference for corporation executives on "Building the Asian-American Market in 1975" is to be held in Washington, D.C., Nov. 19-20.

Cosponsored by the School of Advanced International Studies of Johns Hopkins University and the International Management and Development Institute, the conference will focus on the new climate for U.S. business in Japan, Indonesia, the Philippines, and the People's Republic of China. Several government officials will participate, including C. Melvin Sonne and Arthur T. Miyakawa of the Commerce Department's Bureau of International Commerce.

The conference has the cooperation of the Embassies of Japan, Indonesia, and the Philippines; National Council for U.S.-China Trade; Japan Society, Asia Society; Asian Productivity Organization, and the Advisory Council on Japan-U.S. Economic Relations.

To register, write or call Miss Deborah Nelson, School of Advanced International Studies, 1740 Massachusetts Ave. N.W., Washington, D.C. 20036; phone, 202-785-6800.

Secretary Simon Leads Federal Group At National Foreign Trade Meeting

Treasury Secretary William E. Simon will lead the U.S. Government participants at the 61st National Foreign Trade Convention in New York Nov. 18 and 19.

Secretary Simon will address the opening session, following the keynote speech for business by Rawleigh Warner, Jr., chairman of the convention and Chairman and Chief Executive Officer of Mobil Oil.

About 50 industry, banking, government and academic speakers from Brazil, Canada, England, Germany, Switzerland, Hungary and the Soviet Union, as well as the United States, will participate.

Gabriel Hauge, Chairman of the Board of the Manufacturers Hanover Corp., will address the World Trade Dinner, which concludes the meeting at the Waldorf-Astoria Hotel.

"Critical International Economic Issues—Priorities for Constructive Action" will be the theme of the convention, which has been sponsored since 1914 by the National Foreign Trade Council on behalf of the U.S. international business community.

Inflation, shortages are topics

Sessions will deal with international monetary and finance developments; long-range plans for dealing with energy and materials shortages; the impact of inflation on expatriate compensation; the transnational enterprise and economic development; East-West trade; international management and strategic business planning; U.S. trade legislation and multilateral negotiating mechanisms, and taxation of foreign-source income.

The annual Captain Robert Dollar Memorial Award will be presented to George P. Shultz, Executive Vice President of Bechtel Corp. and former Secretary of the Treasury, for his contributions to the advancement of American foreign trade.

The luncheon speakers are Dr. Hans-Guenther Sohl, Chairman of the Board, August Thyssen-Huette A.G., and President of the Federation of German Industries, and Octavio Gouvea de Bulhoes, President, Banco do Estado da Guanabara S.A., and former Minister of Finance of Brazil.

IMF leader speaks

Under the chairmanship of Robert V. Roosa, Partner, Brown Brothers Harriman & Co., the international monetary and finance session will be addressed by William B. Dale, Deputy Managing Director, International Monetary Fund. Alfred F. Miossi of the Continental Illinois National Bank and Trust Co. of Chicago, President of the Bankers' Association for Foreign Trade, will lead a panel of U.S. and European bankers.

The participants will include Charles W. Carson, Jr., Executive Vice President of Chemical Bank; Harold Christensen, Executive Vice President, Finance, AFIA; Guido Hanselmann, General Manager of Union Bank of Switzerland in Zurich; James J. Kerley, Group Vice President, Monsanto Company; Bruce T. Smith, General Manager (International), Midland Bank Limited, London, and Constant M. Van Vlierden, Executive Vice President, Bank of America.

Ian MacGregor, Chairman and Chief Executive Officer, AMAX Inc., will address an energy and materials session, as will Russell J. Cameron of Cameron Engineers.

UN delegate listed

The foreign investment session will be chaired by M. D. McClusky, President, International B. F. Goodrich Co. The speakers will be Ambassador Clarence Clyde Ferguson, Jr., U.S. Representative to the UN Economic and Social Council; G. Winthrop Haight of Forsyth, Decker, Murray and Broderick; Travis H. Mullenix, Managing Director, Ralston Purina International, and Albert A. Thornbrough, President and Chief Executive Officer, Massey-Ferguson Ltd., Toronto.

Speakers at the East-West trade session will be Frank P. Barnes, Senior Vice President, International Telephone & Telegraph Corp.; Lewis W. Bowden, Acting Deputy Assistant Secretary for East-West Trade, U.S. Department of Commerce; Janos Fekete, Deputy President, National Bank of Hungary; Sergey A. Mkrtumov, Minister (Commercial), Trade Representative of the Soviet Union; Georges R. Potter, Vice President, The Singer Co., and Michael W. Curran, Vice President of the Chase Manhattan Bank.

Norris heads panel

Council President Robert M. Norris will chair the international trade issues session, at which the speakers will be Harold van B. Cleveland, Vice President, First National City Bank; Ambassador Harold B. Malmgren, The President's Deputy Special Representative for Trade Negotiations, and Hoyt P. Steele, Vice President, General Electric Co.

Speakers at the tax session will be Frederic W. Hickman, Assistant Secretary of the Treasury for Tax Policy; William E. Pardoe, Vice President and Chief Financial Officer, Union Carbide Corp., and B. Kenneth Sanden, Partner, Price Waterhouse & Co.

The Declaration of the convention will be presented by a committee headed by Henry G. Parker III, Senior Vice President of Chubb & Son, Inc.

Trade Fairs, Centers

Seoul Trade Center Services Augment Area U.S. Sales, Early Reports Show

A variety of U.S. companies have been promoting their products by using—for short periods—the facilities and services of the U.S Trade Center in Seoul since its opening last spring. These firms, whose promotion vehicles have included exhibitions, film presentations, model demonstrations, technical training seminars, and business appointments, are projecting their sales in Korea in the next 12 months at some $7 million.

To sell successfully in Korea, experienced local representation is required. In view of this need, one of the most useful services offered by the Trade Center is the REPFIND service. During the month of August, for example, the Center became a "temporary office in Korea" for six American businessmen. They came to Seoul to seek qualified agents/distributors as well as build up customer awareness of their products. As part of the REPFIND service, the Trade Center staff briefed them on channels of distribution, patterns in local representation, and import procedures; identification of potential representatives and large end-users; and most importantly, arrangement of appointments. Office space, display area, and access to refreshments also were provided.

In a report typical of many firms who have used the Trade Center, Michael D. Moynahan, Pacific area manager of Rain Bird International, Glendora, Calif., commented: "Using the Trade Center saved my firm both time and money. The staff had valuable market contacts—their help and my use of the centrally located Trade Center as a temporary office eliminated most of the leg-work and enabled me to complete my mission in 2½ days instead of the usual 5 to 7 days necessary."

Executives of all six firms, Rain Bird, NALCO Chemical, Chicago Pneumatic, Pettibone, SGC International and Gates Division of Harris Intertype, reported that they had identified a number of qualified representatives and expected to negotiate final agreement on representation in Korea in the near future. They projected resulting new sales in Korea during the next 12 months at about $1.7 million.

Range of facilities

The U.S. Trade Center, on the ground floor of the chancery of the American Embassy, offers a number of facilities rent-free to any U.S. company or its Korean representative to promote the sale of U.S. made goods. These facilities include 1,100 square feet of indoor exhibit space and an additional paved outdoor exhibit area, a businessmen's seminar room and lounge, kitchen facilities, audio/visual equipment, and standard utilities. The Trade Center staff stands ready to assist in making appointments, setting up exhibits, identifying representatives, and briefing on the market situation and trade procedures.

All U.S. international sales managers planning a business trip to Korea can rely on the use of the Trade Center as their temporary office in Seoul. Firms interested in using these facilities should write to the Director, U.S. Trade Center, Sejong-ro, Seoul, Korea.

U.S. Trade Center, London Reopens In New Quarters

The U.S. Trade Center in London has reopened at a new location at 4/5 Langham Place, near the intersection of Regent and Oxford streets in the city's central business district. The Center, first of the Commerce Department's worldwide network of exhibition facilities, had operated on St. James Street off Piccadilly Circus since June 1961. The new quarters provide a larger exhibit area in an efficient two-level arrangement.

TEMPORARY OFFICE—*Pierre Goral, President of SGC International, used U.S. Trade Center in Seoul to exhibit his products and to talk with a prospective agent. Pictured at right are local representatives of Leesona Corp., who used the Seoul Center for a seminar, with slide show and model demonstration in businessmen's lounge. These facilities are available to visiting U.S. firms to promote sales of their products.*

AT BRNO FAIR—*Dr. R. A. Babel (left), representative for* COMPUCORP *in CSSR, talks with technicians and managers from TST, largest machine tool trust in the country.*

Brno Fair Signals Sizable Potential For Small, Large Computer Systems

Mini computers drew major interest among the equipment displayed last month at the 16th Brno International Engineering Fair's U.S. exhibition. According to participants in the 10-day show, there was also a brisk interest in large systems, and in specialized peripherals, such as optical character recognition equipment, computer output microfilmers, and computerized plotting instruments.

This annual Czechoslovakian event, in which the Commerce Department has participated for several years, attracts close to 400,000 visitors from all over Eastern Europe to see industrial machinery from almost 35 countries. The 1974 choice of U.S. product theme—computers, peripheral equipment, and business machines—was based on a market study projection that U.S. sales of such goods could reach the $15 million level in each of the next three years.

Different size

The current strong demand for mini computers is largely attributable to the fact that the Ryad computer system developed by the Eastern European countries does not include a computer of this size. Such equipment is being considered for machine tool applications and for use by small research organizations.

Other items in which the Czechoslovakians were particularly interested were key-to-disc data entry systems and microfilm equipment—looked upon as labor-saving devices that would increase the efficiency of the offices in which they were used. The area of least potential is in the medium-sized computer and standard peripheral equipment such as tape and disc drives, as such products are being produced in the Ryad system.

Firms are finding it increasingly important to have representation in or near Czechoslovakia to insure that their products are promoted throughout the year. Companies not retaining a representative, however, can carry on an advertising campaign by contacting one of the Czechoslovakian publicity agencies, through which seminars, advertising, and direct mailings can be arranged. For further information on these agencies, , contact the Trade Promotion Division of the Commerce Department's Bureau of East West Trade, Room 4821, Washington, D.C. 20230.

Industrial cooperative arrangements—for example, in which part of the equipment might be built in the United States and part in Czechoslovakia, with provisions for the U.S. partner to purchase a portion of the production—are of particular interest to Czechoslovakians.

As reported in the Oct. 14 issue of *Commerce Today*, the 15 U.S. exhibitors' floor sales during the September fair totaled about $300,000, and an additional $3 million worth are expected in the next 12 months.

U.S. Exhibition Results In Brief

The following summary reports have been received on U.S. overseas commercial exhibitions. Further details and marketing data derived from these exhibitions will be published as available.

Farnborough International Air Show. Farnborough, England, Sept. 2-8. U.S. exhibitors, 62. Floor sales, $3.7 million; 12-month projection, $42.1 million, of which $7.7 millon was estimated by the 8 new-to-market or new-to-export firms. Representatives appointed, 10; agreements under negotiation, 45.

Industrial and Commercial Security Equipment Exhibition. U.S. Trade Center, Paris, Sept. 16-20. Exhibitors, 32, representing 47 firms. Floor sales, $581,000; 12-month projection, $6.9 million, of which $4.2 million is estimated by new-to-market firms. Agreements signed, 10; under negotiation, 47.

Electronics Industry Components, Production and Test Equipment Exhibition. U.S. Trade Center, Singapore, Sept. 23-27. Exhibitors, 15. Floor sales, $38,500; 12-month projection, $1.3 million, of which $665,000 is estimated by new-to-market or new-to-export firms, Representatives appointed, 4; agreements under negotiation, 8 representation and 1 joint venture.

Maritime-USA: Shipboard, Cargo Handling, Port and Harbor Development Equipment Exhibtion. U.S. Trade Center, Taipei, Sept. 23-27. Exhibitors, 22. Floor sales, $527,000; 12-month projection, $20.5 million, of which $11 million is estimated by the 12 firms new to market or to export. Representatives appointed, 7.

Biomedical Equipment Exhibition, U.S. Trade Center, Frankfurt, Sept. 30-Oct. 3. Exhibitors, 40, representing 50 firms. Floor sales, $157,950; 12-month projection, $34.9 million by new-to-market participants and $9.9 million by experienced participants. Representatives appointed, 10; under negotiation, 57.

OFFICIAL ENTOURAGE — *Dr. Gustav Husak (left), Czechoslovakia's Communist Party chief, and Jack R. Perry (right), U.S. Embassy official, tour the U.S. exhibition.*

Worldwide Business Outlook

Oil Bonanza Pushes Nigeria Into An Expansionary Boom

Politically stable, more than ever financially sound, and with black Africa's largest market, Nigeria has moved into an expansionary period, according to the U.S. Embassy in Lagos.

Almost overnight, thanks to the 1973 and early 1974 increases in crude oil prices and in government tax take, Nigeria has enjoyed a quantum jump in revenues and in GDP. Even using a highly conservative estimate of its new oil income, the Federal Military Government projects for fiscal 1974/75 more than a doubling of federal revenues and a near tripling of money available for development expenditure. Still a poor country in terms of per capita GDP, Nigeria this year will nonetheless enjoy an overall GDP approximating that of all the rest of black Africa together.

Government actions

In one of its first reactions to this new wealth, on April 1 the government decreed reductions in import and excise duties, in an effort to counter the inflation that has become a matter of major concern and a cause for growing worker unrest. To the same end, it has effectively upvalued the Naira by approximately 7 percent. The government also took advantage of Nigeria's increasingly solid reserve position to put import payments and remittances of earnings and dividends on a current basis.

Overshadowing most other domestic developments has been implementation of the Enterprises Promotion Decree of 1972, the so-called Indigenization Decree. With effect from April 1, 1974, the Decree stipulates 100 percent Nigerian ownership of 22 activities on its Schedule I, mostly distribution and service activities; and 40 percent Nigerian ownership of 33 other activities, including processing and light manufacturing, on its Schedule II. Full returns are not yet in but it has been estimated that in keeping with the Decree expatriate firms have divested themselves of assets to a value of perhaps $75 to $100 million.

On the evidence now available, it appears that the government has carried out this takeover of expatriate firms in eminently responsible fashion. The expatriate firms had two years from the announcement of the Decree in which to make arrangements; public placements and/or private sales were freely negotiated; the government acted to make finance available to Nigerian buyers through the commercial banks and a newly established Bank for Commerce and Industry; and for a number of firms that acted in good faith but found it impossible to meet the April 1 deadline or other requirements, deferments and even exemptions were allowed.

The government also acted to acquire, with effect from April 1, a 55 percent equity participation in the major oil producers, Shell/BP, Gulf, Mobil, Phillips/Agip and Elf/Erap. It is understood that about 300,000 barrels per day of participation crude are now available for sale by the Nigerian National Oil Company (NNOC) and that this amount may be increased by 1976 to the government's full 55 percent equity share. Still preoccupied with planning and its own organization, NNOC may soon emerge as a force in world markets.

Dominating the economy

Increasingly, oil dominates the economy and the statistics, accounting for 80 to 85 percent of revenues, exports and foreign exchange earnings, and nearly 50 percent of GDP. Production is now at 2.4 million barrels per day, up over 20 percent from a year ago, and the Third Development Plan (1975 to 1980) envisages a continued increase of approximately 10 percent annually. On a posted price now averaging $14.69 per barrel, government royalty and tax take averages $8.58. Nigeria is currently the world's sixth largest producer, and second most important foreign supplier to the United States.

Nigeria did not embargo destinations nor cut back planned production in the aftermath of the 1973 Arab/Israeli conflict. Nor has Nigeria taken a lead in setting prices.

Nonetheless, although it has in the main followed OPEC price and participation policies, Nigeria followed its own counsels in 1974, and, as noted, opted for 55 percent equity participation in major foreign oil producing companies.

Currently, almost all of Nigeria's production is made available to the producing companies on the basis of their equity interests or through buy back arrangements. The Nigerian National Oil Company this year expects to conclude its own contracts for the sale of participation crude. Committed to maximizing oil revenues for the sake of development, Nigeria has so far been no more willing than OPEC members generally to consider concessional pricing of oil for the benefit of its developing African neighbors.

Oil fuels the Nigerian economy, but an estimated 70 percent of its people scratch their living from agriculture. Fortunately Nigeria was spared the worst of the 1973 Sahelian drought, but in its northern states there were serious adverse effects, not yet fully measured, on crops, cattle and in turn the people. However, although domestic food production was down and prices up, Nigeria weathered the drought without the need for massive grain imports or external assistance, and indeed was an aid donor to its northern neighbors. In the north, first

NIGERIAN CHICKENS—*OKE-AFA Farms near Lagos has more than half a million chickens with monthly egg production of more than one million, monthly slaughter of well over 30,000.*

rains in 1974 were promising but this also happened in 1973, and although crops in the south are also off to a good start, it is too early for assurance of a favorable outcome.

Again thanks to oil, Nigeria estimates for calendar 1973 an export surplus on trade account of approximately $1.5 billion (in 1972 this was $0.6 billion) and for fiscal 74/75 anticipates a positive balance of payments account of about $750 million. At the end of December 1973 Nigeria's official foreign exchange reserves were over $600 million and this figure seems bound to be rising.

Although the Federal Military Government is committed to substantial if not controlling equity participation in the "commanding heights of the economy," and has decreed full or partial Nigerian equity participation in the 55 activities in the Enterprises Promotion Decree, it wants and needs foreign investment—on Nigerian terms. These terms are not necessarily onerous, but usually envisage joint ventures with the private or public sector in Nigeria, and training programs that will bring Nigerians into upper level technical and managerial positions.

Significant development

A significant development in 1974 has been encouragement to expatriate banks to establish merchant banking operations. At least five have already been authorized, including three of the larger U.S. banks, First National of Chicago, Chase Manhattan, and First National City, and although their terms of reference have not been made public, it seems they are expected to engage in medium and long-term lending in support of industrial diversification. In addition, Bankers' Trust has opened a representative office, and Bank of America, already established in commercial banking in Lagos and Port Harcourt, is expanding to Kano.

Although the United States emerged in 1973 as Nigeria's largest customer, mostly for oil, its exports to Nigeria have been increasing less rapidly than those of the EC, mainly West Germany and France. Currently Nigeria's third supplier after the United Kingdom and West Germany, the United States sold goods worth $200 million in 1973, against purchases of $800 million. Increasingly, however, U.S. firms that make a serious effort are finding opportunities in Nigeria, where there is a high regard for American goods. A new element is emerging in the Nigerian business community that does not have the traditional ties with European suppliers.

At the state as well as federal level and among the private sector, there is also concern to attract additional American investment, already nearly $1 billion but heavily concentrated in oil. The Nigerian Government is currently contemplating renewal of its investment guarantee agreement with the U.S. Overseas Private Investment Corporation.

U.S. firms are sometimes unfamiliar with Africa and Nigeria, and there is clearly a need for them to undertake more extensive on the spot examination of the opportunities that exist and are growing. Frustrating at times, business in Nigeria can nonetheless be rewarding for those who have learned and accept the complexities of the country and its ways of doing business.

Rwanda Has Ills But Also Offers Unique Attractions

Despite its economic problems, Rwanda offers several advantages to American business firms and potential investors: A tradition of moderation and stability only rarely upset by conflict, a friendly but dignified attitude toward Westerners, a compact and homogeneous country of great natural beauty, a preference for Western goods and services based on historical supply channels and reputation, and a relatively open economy and exchange system.

As one of the least developed of the developing countries, the little Central African nation suffers from ills commonly associated with economies based primarily on subsistence agriculture—a burgeoning population (the highest population density in Africa), limited commodity exports and heavy reliance on foreign assistance. Rwanda is additionally handicapped by its landlocked dependence on inadequate and occasionally politically-disrupted routes to the ports of Mombasa and Dar es Salaam.

Nevertheless, adds the U.S. Embassy in Kigali, the return of political stability following the formation of the Second Republic in July 1973, implementation of a foreign policy which has improved former tense relations with its immediate neighbors, and reimposition of governmental discipline and increased foreign assistance (particularly in infrastructure) have provided a base for economic improvement.

Specific sectors of the economy—particularly commodity exports and foreign assistance projects—have achieved considerable recent success and investments can feasibly be implemented. In other sectors—notably energy imports, inflation, consumer goods and agricultural production—the future poses major problems.

Within this context and Rwanda's relatively open economy, U.S. business firms have some opportunities.

With the recent emergence of Rwandan participation in commercial operations, replacing the traditional Asian and European importers, the possibility of new markets for selected U.S. goods is increased. The requirement that Rwanda import Chinese goods to pay for local costs on the Rusumo road has, however, tied up a good share of the consumer import market. As in the past, American exporters of used and remnant clothing can anticipate a growing market. Since aid assistance is up, an increase in demand for project-related capital goods such as earthmoving equipment is likely.

Technical services including project management contracts (particularly in the agricultural sector which is receiving major bilateral and multilateral attention) will be required. Other potential services include air shipment of key exports and imports in order to bypass difficult overland conditions. Air shipment is considered potentially profitable and experimental shipments of tea, pyrethrum, vegetables and flowers have occurred. The government is looking into the possibility of purchasing or leasing one or several cargo aircraft to form a fledgling national carrier.

U.S. buyer access to the cash crops—coffee, tea and pyrethrum— is somewhat more uncertain than previously. Rwandan coffee is now being sold mainly to agents rather than directly to U.S. roasters and quantities are going to such markets as China and France. New management in the tea and pyrethrum industries is apparently testing the temperature of alternative markets.

Planned investments

Planned investments in roads, foreign donor grants and active government interest are giving new impetus to the long-recognized but little exploited tourist potential of Rwanda's two national parks (one of which is a habitat of the endangered mountain gorilla), pleasant climate, scenic volcanoes and the clear waters of Lake Kivu (which forms the Rwanda-Zaire boundary). Rwanda will never be a tourism rival to Kenya, but it can be an unusual component of a supplementary tourism circuit including Burundi, Bukavu (in Zaire), and Uganda. Such a circuit is, however, ultimately dependent on political conditions in the neighboring countries. Numerous opportunities exist for investments in tourist facilities such as lodges, small hotels, water sports and transportation. The main constraints to such investments are the small current market and limited Rwandan infrastructure.

The energy crisis has focused renewed attention on the long-recognized, easily recoverable but little-utilized methane gas deposits suspended in Lake Kivu. The UNDP and private European consortia are exploring the possibility of large-scale utilization to stimulate the economies of Eastern Zaire and Western Rwanda.

The UNDP, assisted by U.S. satellite technology, is completing an extensive minerals survey of the often intriguing geologic structures of Rwanda. The report is expected to be completed in early 1975.

Slackening Trends Becoming Evident In Denmark's Economy, Import Level

While the slightly reduced growth rate of the Danish economy in 1973, to a level below 4 percent, reflected reduced gains in selected sectors, slackening trends are more widespread this year and overall expansion may drop to about 2 percent.

Most notable are the declines in residential construction from previous boom levels and in public spending, which is being deliberately curtailed to reduce inflationary and payments pressures. The rate of inflation is accelerating, however, affected both by higher prices of imported goods, predominantly oil, and by domestic cost factors. The U.S. Embassy in Copenhagen adds that the overall foreign trade picture is very blurred, with imports up 50 percent at current prices but actually expanding 10 percent or less in real terms. In general, a flattening market is forecast by the Embassy for the remainder of 1974 and part of 1975 with prospects of resumed expansion later.

Industrial investment picked up sharply in 1973 and has maintained a good pace thus far this year, but some softening is expected.

The deterioration of terms of trade, despite quantitatively favorable foreign trade developments, will result in very heavy trade and payments deficits this year and Denmark continues to resort to foreign loans to preserve reserves.

Despite many negative factors, the business climate thus far has remained relatively optimistic outside the construction sector. Expectations of increased export sales, in particular, have kept investment programs at a sustained level.

Dependent upon free access to international markets, Denmark has, throughout the postwar period, been an ardent advocate of liberal trade policies. As a member of the European Communities since January 1973, it has maintained this role within the limitations set by membership loyalties and obvious Danish interests in existing EC arrangements, prominently the common agricultural policy.

The temporary import surcharge (from October 1971 to March 1973), despite comparisons wtih similar measures taken by other and larger countries, was sharply debated at home, both as a deviation from long-established policies and with respect to its usefulness. With its short-lived benefits proven by recent developments, the Danes will probably be even more reluctant than previously to repeat such measures.While the selected excise tax measures adopted in May were to a large extent directed against imported goods, almost any "luxury" tax would have the same effect, given the significance of imported produce in the Danish market.

Denmark's continued participation in the "little snake," the monetary cooperation among five EC countries plus Norway and Sweden, is directed both by community loyalty and self-interest. Although foreign exchange reserves have been preserved at a comfortable level, an international financial crisis could leave Denmark in a most sensitive position. Danish interests in the protection offered by international monetary solidarity naturally makes the country an active participant in any efforts toward an "orderly but flexible" monetary system globally.

As a member of the OECD and later the EC, Denmark has gradually liberalized capital movements in and out of the country. Remaining restrictions relate primarily to the bond market, which plays a more dominant role domestically than in most other countries, and are directed less against foreign investment as such than against the inflationary dangers of abrupt shifts in domestic money supply which might result.

The very heavy price increases on many Danish imports tend to distort the real picture of trade developments this year, as noted earlier. During the first 4 months of the year, imports rose almost 50 percent in current prices but the volume of goods imported probably exceeded last year's level by less than 10 percent. Official forecasts have pointed toward import stagnation in 1974, quantitatively. A real increase of 5-10 percent seems more likely, however. Conversely, Danish exports may go up by 15 percent in volume and by twice that rate in actual cost. That a net deterioration of the Danish foreign trade account will result is generally agreed, with oil accounting, of course, for the better part of the extra cost.

The tendency toward faster growth of trade with EC than with third countries has become strengthened, to the disadvantage of the United States among others. An unusually sharp increase in otherwise low import values from Eastern European countries is directly related to fuel imports, both oil and solid.

While Danish imports of chemicals are up 70 percent this year, partly reflecting higher prices, U.S. sales rose less than 20 percent. The loss of market was concentrated, however, in basic chemicals, reportedly due to failing American supplies of liquid ammonia. Also, Danish imports of various semi-manufactures continue to grow, but there is a drop in specific items imported from the United States, particularly plywood, which in recent years had gained in the Danish market. With the rather dim prospects for the building sector at present, this development is not an unexpected, but hopefully a temporary, interruption which should not detract from longer term prospects.

The activation in 1973 of industrial investment was reflected in a 34 percent increase in machinery imports. Despite positive market reports from selected areas, however, American exporters generally failed to take advantage of this situation and the value of American machinery exports to Denmark in 1973 actually declined some few percent. This year looks somewhat better but American exports still are behind the pace. It would appear that American exporters are neglecting opportunities in this market.

In electronic equipment, efforts are apparently more concerted—or at least more successful—with a small market loss last year being fully regained this year. The market for transportation equipment showed heavy gains in both 1973 and early 1974, affected by high unit costs of

IN THE NORTH SEA—*Oil from the Dan Field is transported by the tanker Marie Maersk to Danish refineries. The platform is U.S.-owned, leased by the Danish Underground Consortium.*

individual items (aircraft and oil-drilling vessels). Viewed in the longer term, as this market must necessarily be, American equipment must be considered well established. The otherwise small market for automobiles of American manufacture, normally not able to compete with U.S. subsidiary productions in Europe, recently has shown unexpected gain. Prior to the oil crisis, a clear tendency showed toward somewhat larger cars, and the possibility should not be excluded, in the longer term, of some growth of direct auto exports. For the time being, however, the almost prohibitive, temporary increase in the automobile tax will delay most purchases.

Guyana Shows Signs Of Progress; Heavy Equipment Is Key Plan Input

Despite inflation and a poor economic performance in 1973, the U.S. Embassy in Georgetown sees signs of progress in Guyana. Government-funded projects have resulted in additional and improved infrastructure. Moreover, with increased production in sugar, bauxite and rice as well as higher export prices, the economy has become more stable in 1974. The most promising prospects for growth lie in the agricultural sector, and in natural resource development. Opportunities for trade in heavy equipment and machinery will continue to exist as the 1972-76 Development Plan is realized.

As a result of the 1973 downturn in the economy, rising costs, and the need to conserve foreign exchange, Guyana will probably curtail capital expenditures in 1974. Some parts of its development plan may be deferred unless more concessionary external capital becomes available. Nevertheless, expansion programs are moving ahead in priority sectors such as agriculture and fishing, albeit at lower levels than anticipated.

The government is seeking new areas of agriculture to exploit. Corn production is expanding, and experimental plots of soybeans are being tested this year. Should soybean production succeed, it will provide an additional source of vegetable oil as well as feedstock, both chronically in short supply.

Shrimp exports may increase this year as newly-purchased trawlers come into service, although the resource in this area may be reaching limits of judicious exploitation.

The hydroelectric power scheme, which is designed to provide electric energy for an aluminum smelter, is still in the feasibility stage. Under United Nations auspices the World Bank is carrying out a country-wide hydroelectricity survey, although it is likely that the government will choose a site for the facility in the Upper Mazaruni River region.

A major irrigation drainage project is scheduled to begin its construction stage soon, financed by the World Bank. Infrastructure expansion activities now in progress include rebuilding and extension of dikes and other sea defenses, road building, sewage and water improvement, and expansion of electric power facilities. Electrical power output increased by 24 percent over the period 1969-1973. Offshore oil exploration is currently under way and will probably continue into 1975.

Guyana receives economic assistance from several nations. Among larger lenders and donors are the United States, United Kingdom, Canada, Federal Republic of Germany, and Peoples Republic of China. Venezuela recently joined the group of aid sponsors with a $15 million soft loan to Guyana. External capital will finance the major portion of the Development Plan.

Guyana is committed to development of a basically socialist economy which tolerates some degree of private enterprise. Due to the small internal market, and more favorable locations elsewhere in the Caricom group, opportunities for investment in manufacturing are limited. In the area of natural resource exploitation where there is more potential, all foreign investment must be on a joint venture basis with the government. At present the government insists upon majority equity and management control. This policy makes Guyana more attractive for turnkey investment rather than long-term capital risks.

Foreign firms have expressed interest in timber and pulp operations in Guyana, and two possible joint venture investments in this field are in the negotiation stage now. If successfully completed they will represent the largest inflow of external capital yet seen in Guyana. A shrimping and shrimp processing operation, a joint venture of government and private British and Japanese interests, was agreed upon this year.

Capital flight occurred during 1973 (some $1 million), due probably to generally unfavorable business conditions rather than any movement toward disinvestment. Nevertheless, there has been no significant new foreign investment in Guyana since the 1971 nationalization of the ALCAN bauxite mines and alumina plant. The government, moreover, has pledged to nationalize the remaining privately-owned bauxite company, Reynolds Guyana Mines, Ltd., by the end of 1974. Discussions between government and company officials have been going on intermittently since late 1973. With the exception of Reynolds, the book value of U.S. investment in Guyana is less than $10 million.

The U.S. share of Guyana's import market, 24 percent, is second only to that of the United Kingdom. Principal U.S. exports to Guyana include heavy machinery, chemicals, and wheat. The main U.S. imports from Guyana are sugar, bauxite, and shrimp.

The government of Guyana is determined, however, to divert trade from its traditional partners (U.S., U.K., Canada, and Western Europe) to socialist bloc and non-aligned countries. Little movement in this direction occurred during 1973, although Guyana exported some $8 million worth of alumina to the Soviet Union, and by mid-1974 had shipped $9 million in sugar to the Peoples Republic of China. Imports from these non-traditional partners will undoubtedly increase as government efforts continue (state trading for private consumption, public sector equipment purchases, etc.).

Guyana's trade with its Caricom partners, especially Jamaica, Trinidad and Tobago, and Barbados, followed normal patterns in 1973. Guyana registered surpluses with Jamaica and Barbados due to rice exports and had a large deficit with Trinidad and Tobago resulting from petroleum imports. Total two-way trade between Guyana and all its Caricom partners was $60 million, the increase in trade over the previous year (1972—$43 million) primarily being due to higher prices for Trinidad's petroleum products.

Although Guyana for the past three years has been a net importer within Caricom, its membership in the regional organization has paid off in other ways. For example, Trinidad this year provided a $21 million balance of payments loan to help meet the manifold increase in the cost of fuel imports.

The best prospects for exports to Guyana are keyed to the country's Development Plan. Generally, this means there will be opportunities for sales of equipment for infrastructural projects such as road building, dredging, power transmission, and building construction. Good prospects will exist over the next few years for equipment sales in the timber industry, as well as in fishing and shrimping.

Recent large U.S. sales of mining equipment indicate a preference for American products. Expansion plans in the bauxite industry call for pollution control devices, one specifically being an electrostatic precipitator.

Exporters offering products used in small-scale, labor intensive manufacturing, and energy-saving devices are likely to find ready markets in Guyana. Although many of Guyana's imports of capital goods are tied to foreign government lending, which limits U.S. sales participation, the country is increasingly turning toward international financial institutions for assistance. This should increase sales potential for price competitive U.S. firms.

International Business Reports

The Climate for Investment Abroad. Compiled and edited in the U.S. State Department's Bureau of Economic and Business Affairs by Terry R. Broderick and William H. Courtney. 109pp. $2.50.

The narrative statement for each country or territory in this book was prepared by the American Embassy or Consulate in response to a State Department request. Groups the countries by geographical location. World areas included are Africa, Asia-Pacific, Eastern Europe, Near and Middle East, Western Europe and Western Hemisphere. A section is included on recent developments that may have changed the investment picture in some countries.

Write: Chamber of Commerce of the United States, 1615 H St., NW., Washington, D.C. 20062.

World Trade Area Telephone Directory.

The purpose of this special New York directory is to help in finding people and businesses in the World Trade area, including businesses engaged in world trade as well as local services and retailers. Includes both white and yellow pages.

Write: New York Telephone, 100 Church St., Room 912, New York, N.Y. 10007.

Major Import Markets for Oilcake, 336pp., $15; Animal Casings, 202pp., $15; Major Markets for Tropical Sawnwood in Western Europe, 226pp., $10; The Market for Dehydrated Vegetables in Austria, Denmark, Germany, Norway, Sweden and Switzerland, 189pp., $15; The Market for Diesel Engines in Norway, Belgium, France and Italy, 100pp., $10; The Market for Sucrose-Based Chemicals with Specific Reference to Citric Acid, Sorbitol and Sugar Esters, 106pp., $10; The Market for Table Olives in France, Italy, the United Kingdom, Switzerland and other Selected Countries, 98pp., $10.

The contents of each International Trade Centre market survey and report above include: analyses of present and future demand for the product surveyed, according to major end uses in selected markets; description of trade channels and such commercial practices as handling, insurance, customs duties, credit arrangements; names and addresses of major intermediaries; main consumers and potential consumers; government regulation of imports; and recommendations for promotional action to increase sales.

Write: Unipub, Box 433, Murray Hill Station, New York, N.Y. 10016.

Catalog of Publications from International Atomic Energy Agency. 195pp. Free.

Publications on atomic energy and its peaceful uses in medicine, agriculture, industry, earth and environmental sciences, and power production are described in this fully annotated catalog. Describes all in-print titles, including series publications, monographs, conference proceedings, technical directories and reports, safety manuals, bibliographies, study tour reports, periodicals, and documentation. Titles are listed by subject and are indexed by key word and by series.

Write: Unipub, Box 433, Murray Hill Station, New York, N.Y. 10016.

Nigeria: Options for Long-Term Development. Published by Johns Hopkins University Press, 1974. 256pp. $12 cloth, $6 paper.

This World Bank publication emphasizes the importance of rising oil production to Nigeria's economy. It is the fifth in a current series of World Bank country economic reports being issued for use by governments, scholars, and professionals in various aspects of economic and social development. Previous reports in the series have dealt with Colombia, Trinidad and Tobago, Ecuador and Peru.

The latest report was prepared by a World Bank mission to Nigeria in 1971 led by Wouter Tims, now Director of the Bank's Economic Analysis and Projections Department. Although the Nigerian study has in some respects been overtaken by rapid changes in oil prices, the world economy and the effects of drought in the Nigerian North, its view is broad enough to point strategically to the opportunities and challenges which Nigeria faces in the next 10 to 15 years. It puts into perspective the exceptional problems of a populous country suffering inflation, high unemployment and a disturbing rate of urban growth, but which can turn to rich oil resources to help finance immediate and longer-term development.

Write: The Johns Hopkins University Press, Baltimore, Md. 21218.

Exports of Manufactures from Developing Countries. By A. H. M. Mahfuzur Rahman. Published by Rotterdam University Press. 140pp. $15.80.

Among the urgent problems of developing countries are those of increasing their foreign exchange receipts and creating more employment and hence a somewhat better income distribution. In this book, dealing with the possibility of exporting and hence producing more manufactures, the author offers contributions to the solution of both problems.

Write: International Scholarly Book Services, Inc., P.O. Box 4347, Portland, Oregon 97208.

International Commercial Arbitration. Compiled and edited by Clive M. Schmitthoff. Co-published with the British Institute of International and Comparative Law. $37.50.

Contains a representative selection of modern arbitration documents and source material prepared for a London Conference just held under the sponsorship of the British Institute of International and Comparative Law.

Schmitthoff has attempted to provide the basis for a wide-ranging comparative survey of current principles, techniques and methods in the principal fields of international and regional commercial arbitration for use by lawyers, teachers, arbitrators and businessmen.

Write: Oceana Publications Inc., Dobbs Ferry, N.Y. 10522.

Calendar For World Traders

Nov. 7—Milwaukee—Dinner meeting of the Milwaukee World Trade Club. Jacques Vandamme, Chairman and Chief Executive Officer of Fiat-Allis Construction Machinery Inc., will discuss Trading and Understanding.

Nov. 7—Memphis—Mid-South Exporters Roundtable dinner meeting, Monte's Restaurant. Speaker: Wellington Gallardo, American Embassy, Quito, Ecuador.

Nov. 12—Louisville—Kentuckiana World Commerce Council Meeting, Holiday Inn Brownsboro East.

Nov. 13—Atlanta—Seminar on Doing Business in the Near East and North Africa, Stouffer's Inn.

Nov. 14—New York—Overseas Automotive Club Inc. luncheon meeting, Summit Hotel.

Nov. 19 — Memphis — Memphis World Trade Club, Southwestern University.

Nov. 20—Louisville—25th Kentucky World Trade Conference, Galt House. Sponsors: University of Louisville International Center, Kentucky Department of Commerce, Kentucky Chamber of Commerce, Louisville Chamber of Commerce, Memphis District Office. Speaker: Charles J. Barrett of the Bureau of International Commerce.

Dec. 5—Milwaukee—Dinner meeting of Milwaukee World Trade Club. Speaker: R. Alex McCullough of the U.S. Export-Import Bank.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, and details on major construction and expansion projects.

Licensing, Investment Abroad

MEXICO—An industrial organization with 20 acres of development land seeks U.S. companies to take advantage of its facilities which can accommodate from 6 to 10 assembly plants, employing up to 5,000 workers. The organization, located in Hermosillo, is devoted exclusively to assembly industries. Interested U.S. businessmen are to contact ISI-MEX Director General, Ing. Armando Hopkins D., Aptdo. Postal 1154, Hermosillo, Sonora, Mexico, Telephone 2-25-01. P-74630.

1389—QATAR—Seeks joint venture to establish an **offshore supply service for ships.** Operation would include several fast, medium-sized boats to supply tanks and freighters at sea and make crew changes. Supply yard and support facilities would be located at Doha. Foreign Investment Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74623.

1389—UNITED KINGDOM—Firm seeks joint venture with **U.S. oil drilling contractor.** Would work on contracts obtained for both onshore and offshore oil exploration projects. Seeks U.S. partner with mobile land rigs and light rigs having 5,000 ft. capacity, and operators of offshore platform drilling rigs with 20,000 ft. capacity. British firm will consider any form of association and working agreements. R. L. Messent, Managing Director, Petrocon Drilling Ltd., Petrocon House, The Square, Richmond TW9 1DZ, England. P-74624.

1889—UNITED KINGDOM—Established producer of paper machinery, interested in **servicing oil industry,** seeks agreement with U.S. firm requiring a local servicing facility. Scottish concern is also interested in license to **manufacture equipment for offshore oil industry.** In addition, wants to **purchase steel tubes and ball** bearings. James Wilson, Purchasing Manager, Bertrams Ltd., St. Katternes Works, Sciennes, Edinburgh, EH91PF, Scotland. P-74634.

2400—CANADA—Firm seeks joint venture to expand **facility for processing firekilled timber** for use as raw material in production of high-grade paper. Plans to process 20,000 cords of firekilled spruce annually. Needs capital; timber is available in Barrhead area. Alex Ziniewicz, President, Alexander Pulpwood Co., Ltd., Box 1510, Barrhead, Alberta, Canada. P-74628.

2834—UNITED KINGDOM—Firm seeks arrangement with U.S. company for manufacture and distribution in United Kingdom under license and/or royalty basis of both **prescription and non-prescription pharmaceutical or veterinary products.** Company presently manufactures, distributes and markets proprietary pharmaceutical and associated products and reportedly has worldwide export sales. Plans construction of new factory to include sterile manufacturing and filling facilities envisaging a period of sustained growth during 1970's and 1980's for its own products and development of new lines. Firm established 1935, has 250 employees, 15 salesmen, nominal and issued capital of $720,000 and annual sales volume in excess of $6 million. Representative of company intends visit to U.S. latter part of October. J. W. S. Woodford, Production Controller, Optrex Ltd., 17 Wadsworth Road, Perivale, Greenford, Middlesex UB 6 7JW, England. Cable: OPTREX GREENFORD MIDDX. Telephone: 01-997-4441. P-74638.

3296—INDIA—Firm seeks technical know-how of direct melt process or similar process for manufacture of **glass wool and reinforced fiberglass.** Firm has received a letter of intent from Indian Government to establish a new unit producing fiberglass in Uttar Pradesh. New factory is permitted to install capacity of 3,200 tons of fiberglass and glass wool per annum. Estimated cost of project is about $7.2 million. Company is one of the largest and oldest British mercantile firms in Calcutta, and continues to expand business interest in electronics, cigarettes and chemicals. In addition to its major business interest in tea, jute, engineering and wooltops, company engages in export trade and investment. For further information write Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-74637. OPIC

3500—INDIA—A state industrial development organization seeks technical know-how for manufacture of **cellulose nitrate, forged hand tools, furniture, fuel injection equipment, bearings and gear and gear boxes.** Corporation's proposed projects include production of 1,650 metric tons of cellulose nitrate sheets, rods and tubes annually; manufacture of 3,000 metric tons of forged hand tools a year; and facility to manufacture metal furniture for export. Also, wide-range of fuel injection equipment such as nozzles, pumps, valves and test machines and several kinds of bearings. J. C. Juneja, Technical Advisor, Haryana State Industrial Development Corporation (HSIDC), S.C.O. 4-5, Sector 17A, Post Box 22, Chandigarh, India. P-74629, OPIC. Details are available from Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230.

3500—MALTA—Automobile assembler seeks joint venture to diversify product line. Interests include production of **small automobile such as ambulances and agricultural equipment.** Production would be exported to Europe and North Africa. Company has all necessary machinery for assembling motor vehicles and related products. Firm has plant floor space of 60,000 sq. ft., plus storage and administrative area. Is part of major group with wide range of business interests, including manufacture of air conditioning equipment and electrical components. Seeks technical know-how, capital participation from U.S. firm. Gordon Mizzi, Managing Director, Car Assembly Ltd. (CAL), Marsa, Malta. P-74626. OPIC.

3523—INDIA—Firm seeks license to produce **cotton baling presses.** Plans to manufacture ten presses annually in its existing facility, adding essential balancing equipment. Most raw materials such as steel castings, sections and bronze parts are available locally. According to the company, projected demand in India for baling presses is 100 spread over 10 years. Presently, firm produces cotton ginning and brickmaking equipment. Hargovind Bajaj, Managing Director, Bajaj Steel Industries Private Ltd. (BSI), Imambada Road, Nagpur 440002, India. WTDR. P-74632. OPIC.

3555—GREECE—Small firm is seeking licensing or joint venture arrangement to manufacture **presensitized printing plates.** Company currently produces printing ink and photo-sensitive chemicals for litho-printing and engraving. In 1973, firm produced 55 metric tons of chemicals. Established as proprietorship in 1946, company was reorganized into limited liability company in 1970. Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. WTDR. P-74633. OPIC.

3573—JAPAN—Large manufacturer of welding machines and transformers is diversifying into electronics. Seeks exclusive license to produce **minicomputers designed automatically to control sequent operations of plural number of power driven industrial machines.** Firm is prepared to purchase necessary manufacturing equipment from U.S. licensor. Company has 2,500 employees, operates 6 production facilities and maintains 27 branch offices. It reports 1973 annual sales of $120 million. Takayuki Ogawa, Chief, Research and Development Section, Osaka Transformer Co., Ltd., 1-11 Tagawa-cho 2-chome, Yodogawa ku, Osaka

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Foreign Investment Services Staff, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

532, Japan. Phone, Osaka (06) 301-1212; cable, DAIHEN J; telex, 523-3757. P-74636.

3600—UNITED KINGDOM—Seeks license or joint venture to manufacture **synchronous motors, shaded pole motors, relays, timers and solenoids.** Presently markets proximity switches, amplifiers and power supply transformers. Firm reportedly has sources of financing, active young management. R. J. Seago, Managing Director, Seatech International, High St. Green, Sible Hedingham, Essex CO9 3LH, England. P-74635.

3600—UNITED KINGDOM—Glasgow manufacturer of **power units, pumping systems and hydraulic components** is interested in supplying U.S. firm engaged in offshore drilling. Would also consider licensing agreement for manufacturer of related products. Is interested in entering into joint venture in Ireland. K. Bookman, Director, Air Power Hydraulics Ltd., 2-4 Erskine St., Hillington Industrial Estate, Glasgow, G52 4 PQ, Scotland. P-74631.

3624—INDIA—Seeks joint venture to manufacture **graphite electrodes** used in steel melting furnaces with production capacity of 10,000 tons per year. Total estimated cost of project is $2 million. U.S. participant is offered equity up to $1 million, plus a 1.5 percent royalty payment annually. American partner also would assist in acquiring necessary machinery and equipment. Indian firm is involved in industrial and financial consulting in Calcutta. Its owner operates a facility making wood products for electrical and pharmaceutical industries. K. M. Goel, Proprietor, Soni & Co., P-7 Mission Row Extension Calcutta 700001, West Bengal, India. WTDR. P-74625. OPIC.

3823—YUGOSLAVIA—Seeks licenses to manufacture **pressure and differential transmitters for process controls.** Prepared to purchase key components. Will consider cross licensing, other areas of mutual interest. Firm presently produces automatic measuring and control equipment. Engages in a number of diverse activities, including design, construction and production of equipment for complete plants in energy and processing industries. Prof. dr Bozidar Matic, dipl. el. inz., Energoinvest, P.O. Box 158, Sarajevo, Yugoslavia. P-74627. OPIC.

Bulgaria Seeks Cooperation With Agribusiness Contractor

The Government of Bulgaria is seeking cooperation with a large U.S. agribusiness contractor to undertake the complete rationalization of agriculture, poultry, and animal husbandry in the District of Silistra. A new fruit and vegetable complex is to be organized on 28,300 hectares. A grain and meat complex is to be established on 122,810 hectares, complete with plant growing; feed production; cattle breeding; calf fattening; pig, poultry, and sheep breeding—all on the most modern, scientific basis.

For further information, write: D. Piggot, Bureau of East-West Trade, Room 4816, U.S. Dept. of Commerce, Washington, D.C. 20230; telephone, 202-967-3352/3.

Pakistan: Tanker For Scrapping

Indus Industries Ltd., a private joint stock company, has obtained permission from the Government of Pakistan for importing an unserviceable cargo/passenger ship or a tanker for scrapping. Scrap metal would be used for manufacture of steel in electric furnaces. The firm estimates the cost of the required vessel at around $3 million. Potential U.S. exporters should contact Dr. Syed Nassaruddin, Mng. Dir., Indus Industries Ltd., 68-Q, Block 6, P.F.C.H. Society, Karachi.

Foreign Trade Inquiries

These trade opportunities are based on reports received from the U.S. Foreign Service by the Trade Opportunities Division, Room 1322, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1972 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Building construction

• **15100—ALGERIA**—One turnkey plant for refining and conditioning salt and rock salt at El-Outaya (Biskara); approximate annual production 140,000 metric tons, with future production of 470,000 metric tons. Bid deadline Nov. 30. Correspondence in French required. Ten copies must be made of offer. All specs must be metric. For further information or to visit El-Outaya project area, contact Ben Houma, Project Chief Sonarem, Division Engineering et Developement, Projet Sel, Rue Bernard Amiot, Cinq-Maisons, El Harrach, Algiers. Cables: Menebar Alger. Telex: 52910. Phone: 76-51-60 to 62. Tender documents and blueprints available for short-term loan from U.S. Department of Commerce, Transportation and Capital Equipment Division, Room 2812, Washington, D.C. 20230. ★ 202-967-5593.

• **15100—ALGERIA**—The Societe Nationale de Construction Mechaniques (SONACOME), Route National 1, Birkedem, Algiers, (cable: SNCOME ALGER, telex: 52800) has extended until Nov. 15 the deadline for notification by firms interested in bidding on one turnkey metal spring plant of a minimum production capacity for 1980 of 7,600 metric tons. Tender documents cost 100 DA (about U.S. $25) and require bids to include training technicians, technical assistance, and spare parts supply. Firms will be allowed six months after Nov. 15 to submit offers.

• **15100—ALGERIA**—One turnkey plant for dressing gauze (absorbent gauze) weaving at Isser, Wilaya (Province) of Tizi-Ouzou. Production capacity: 5,400,000 meters yearly of gauze of 120 centimeters width. Bid deadline Dec. 19. Offers and all correspondence must be in French. Offers should be in triplicate, include technical literature and guarantee, and remain valid 90 days past bid deadline. For equipment, separate offers should be made c.i.f. and f.o.b. Tender documents available from Transportation and Capital Equipment Division, Room 2130, U.S. Department of Commerce, Washington, D.C. 20230.

Women's, misses', juniors' outerwear

2335915—UNITED ARAB REP.—Women's, misses', & juniors' high fashion dresses. Est. annual sales potential $400,000. Products imported for resale in Egypt. Desires descriptive brochures & photos of products. Reply to—Dr. D. Sheta, PO Box 21, Mohamed Farid, Cairo. Tel. 807469.

Office furniture

• **25220—NETHERLANDS** — The Secretary Board of Awards, Hendrik V. Nassau Ouwerkerk Kamp Budget and Finance Division Bldg. 27, Brunssum (L), has issued tender No. 54-B-74 for eight metal frame folding tables, various types of chairs, filing cabinets, and metal desks. Bid deadline Nov. 11. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

Fabricated rubber products

3069427—JAPAN—Rubber sheet for tennis court (tennis court instead of en-tout-cas court). Est. annual sales of $20,000. Buyer is small importer of silver ware & sundry goods from W. Germany, U.K. & U.S. Provides domestic sales all over Japan through its subsidiary Toyosansho Co., Ltd. Annual sales $100,000. Seeks mfrs. & suppliers to import item for distribution. Reply to—Mr. Rouholla Momiazi, Pres., Ruhi Trading Co., Ltd., 22-30 Kano-Cho 2-Chome, Ikuta Ku, Kobe 650.

Plastic products

3079121—MALTA — Polyethylene film/sheets less than 3.00 millimeters—horticultural quality. Quantity required 16 metric tons. Est. cost about $20,000. Firm produces & supplies rooted & unrooted chrysanthemum cuttings for year round cultivation. Main export markets are Italy, U.K. Quotation is to be price per kilo, carriage, insurance & freight charges by sea to Malta included. Delivery as soon as possible. Payment preferably by cash against documents. Reply to—Mr. C. Tomlins, Co. Engineer, Mediterranean Flower Products Ltd., Ta-Qali. Cable: Mediflor-Malta; Tel: 40381/2.

Farm machinery

35200—GHANA—Cocoa Production Division, Ghana Cocoa Marketing Board, P.O. Box 3197, Accra, requires the following: backpack insecticide sprayers, approximately 2.5 gallon, motorized, estimated 10-15,000 annually. Five samples required. Unsuccessful bidders will receive them back. Quote f.o.b. or c.i.f. TEMA, including 20 percent for parts. Provide specifications, delivery time, and after sales servicing details. GCMB responsible marketing country's most important crop and is largest foreign exchange earner. Funds reportedly available finance procurement on sight draft basis. No specifications or plans available. Bid No. 11 with deadline Nov. 19.

Construction, mining, materials handling machinery, equipment

• **35330—INDIA**—Supply of 2 trailer-mounted heavy duty water well drilling rigs. Rotary with percussion type, with accessories, tools, and literature. Bid deadline Dec. 10. Tenderer is Directorate General of Supplies and Disposals, Jeevan Tara Bldg., Parliament St., New Delhi.-110-001. Bids to be submitted to the Directorate at above address. Tenders available from India Supply Mission, 2536 Mass. Ave., N.W., Washington, D.C. 20008. Cost $2.75.

Special industry machinery

3559511—DOMINICAN REP.—Machinery or complete plant for re-refining of used motor oil; capacity one million gallons/yr. Mr. Cortina in process of forming co. for re-refining & sale of used motor oil. Financing expected from Fondo de Inversiones Para el Desarrollo Economico (FIDE), a development lending fund operated by Dominican Central Bank. Interested in catalogs, information, price quotes. Spanish correspondence preferred. English acceptable. Write to—Victor Hugo Cortina H., Proyecto 10 Esq. Lope de Vega, Ed Espaillat-2 Piso, Santo Domingo. Tel 565-8330.

Communications equipment

• **36600—AUSTRALIA**—The Deputy Assistant Director-General (Supply), 3rd Floor, 199 William St., Melbourne, Victoria 3000, is seeking bids for miscellaneous video equipment. Bid deadline Jan. 9. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

• **36600—COLOMBIA**—The Empresa Nacional De Telecommunicaciones, Telecom Calle 23 No. 13-49, Piso 6, Bogota, has issued tender No. 100/74 for renovation of its telephone and telegraph carrier systems, as well as increasing its telex and telegraph services. Bid deadline Nov. 27. Copies of tender announcement and specifications available at address shown above for $80.

• **36600—COLOMBIA**—The Empresa Nacional De Telecomunicaciones, Telecom, Calle 23, No. 13-49, Piso 6, has issued tender No. Licitacion Publica Internacional Birf III-07/74 for three telephone exchanges. Bid deadline Nov. 15. Copies of tender announcement and specifications available from above address for $4 not refundable. Purchase financed by World Bank.

• **36600—EGYPT**—The Egyptian General Organization of Telecommunications, International and Radio Communication Sector, Auto Exchange Bldg., Room No. 27, P.O. Box 795, Ramses Street, Cairo, has issued tender No. B/B No. 160 for supply and supervision of installation of a standard earth station to operate with intelsat satellite and to be in conformity with performance characteristics of earth stations in the Intelsat IV-A System. Bid deadline Dec. 16. Offers should be on an f.o.b. basis, while freight and insurance to Alexandria, Egypt should be indicated separately. Payment will consist of installments over a period of not less than 7 years with down payment not exceeding 5 percent of total value of order. Copies of tender announcement and specifications available from above address free of charge for first copy and for $35.50 for each additional copy, or on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

• **36600—ETHIOPIA**—The Imperial Board of Telecommunications of Ethiopia, P.O. Box 1047, Addis Ababa, has issued tender No. 20/74 for private branch telephone exchanges. Bid deadline Dec. 27. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

• **36600—INDIA**—The Kerala State Electricity Board, Post Box 65, Trivandrum 695023, has issued tender No. IDA/KSEB/8 for power line and communications equipment. Bid deadline Dec. 5. Copies of tender announcement and specifications available from above address for about $14. Program being financed by International Development Administration.

• **36600—IRAQ**—The Ministry of Transport, Baghdad, has issued tender No. FD/124/72/9754 for supply, installation and putting into service 442 radiotelephone sets for railway service. Bid deadline Dec. 22. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

• **36600—IRELAND**—The Contracts Section, Department of Posts and Telegraphs, Marlborough St., Dublin 1, has issued tender No. P.P.-1/74 for supply, install and test, including all work to completion, D.C. power plant for the telephone exchanges listed in Schedule 1 of referenced specification. Bid deadline Nov. 25. Project financed by government funds. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

• **36600—IRELAND**—The Contracts Section, Department of Posts and Telegraphs, Marlborough St., Dublin 1, has issued tender No. SS 743 for automatic telephone equipment. Bid deadline Nov. 21. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

• **36600 — PARAGUAY** — The Divisionfe Adquisiciones, Ande Departmento De Licitaciones, Calle Padre Cardozo 355, Asuncion, has issued tender No. 104/74 for radio communications equipment at estimated cost of $65 000. Bid deadline Nov. 25. Copies of tender announcement and specifications available from above address for $15. Proposals must be submitted through local agents.

Instruments for measurement, control and analysis

• **38200—AUSTRALIA**—The Commonwealth Scientific and Industrial Research Organization, P.O. Box 225, Dickson, A.C.I., Australia 2602, is seeking bids for supply, delivery and installation of one 300 sample liquid scintillation counter for measuring radio activity. Copies of tender form and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

Surgical, medical, dental instruments

• **38400—SRI LANKA**—The Department of Health, P.O. Box 584, Colombo, has issued tender No. COM/TEN/74/160 for surgical suction equipment. Bid deadline Nov. 19. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science & Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, ★ 202-967-2939.

Wholesalers

50930—JAPAN—Copper scrap, "berry" grade; estimated annual purchase $50,000; copper-alloy scrap, "ocean" or "honey" grade; estimated annual purchase $50,000. Buyer wishes to purchase 20 short tons each of the above grades on trial basis. C&F prices per pound must be 60 cents for "berry" and 47 cents for "ocean" or "honey" or less. Buyer specializes in import and distribution of nonferrous metal scrap, 1973 annual sales were $10 million. Reply to—Mr. M. Matsumoto, Mgr. Dir., Matsumoto Masao Co., Ltd., 16, Susano-Dori 6-Chome Hyogo-Ku, Kobe 652. Cable Matsumasa Kobe; tel. 078-575-2570; telex JX78612.

Antique, secondhand stores

59310—FRANCE—Secondhand clothing; surplus clothing; textile remnants. Created in 1971, firm imports and sells textiles, and clothing including secondhand clothing. Also exports these articles to African countries. Eurafric is currently capitalized at 150,000 francs, employs 60 persons and annual sales total $4 million. Meets its commitments punctually and has a good credit appraisal. Bank references: Societe Generale, Paris. Reply to—Mr. Georges Philippe, Mgr., Eurafric S.A., 112, Rue de Richelieu, 75002 Paris. Cable Ricphi-Paris; telex: 21850 Ricphi; tel: 742-1587.

Motion picture production, distribution

78130—BELGIUM—Recent movie pictures 16 mm in English, color or black and white, for showing on rigs and encilliary in North Sea. Firm is a shipchandler specializing in provisions, bonded stores, deck, engine and cabin supplies. Needs 21 movie pictures during November to show on rigs operating in North Sea. Has need for supply of three different pictures weekly. Reply to—Mr. J. Materne, Mgr., European Maritime Supply Co. Ltd., Groendaallaan 25, 2060 Merksem. Telex: Eumart B 33403; phone: 031/45 18 60; cable: Eumasupply.

Turkey Intends To Buy Beer Bottling Equipment

TEKEL is interested in obtaining information and data in the form of catalogues, estimated costs, capacities, etc. for stainless steel beer barrel bottling units for their beer plants in Istanbul, Ankara, and Yozgat. Battling equipment will be automatic and will have washing, sterilization and filling units. Estimated hourly filling capacity: 50 stainless steel tanks of 50 liters. Equipment will also have a "flash pasteurization unit" in suitable capacity for pasteurization of beer to be filled. Upon receipt

of data, the requested tenders will be invited. Interested U.S. firms should forward required data to: TEKEL genel mudurlugu (Tekel General Directorate), Muskirat Fabrikalar Subesi Mudurlugu, (Beverages Plant Branch Management), Unkapani, Istanbul.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Pulp mills, products

26112—AUSTRALIA — Bleached softwood. Requires 20,000-30,000 tons/annum woodpulp & bleached softwood. Tricentrol is British controlled intl. co. exploring worldwide for oil, gas & minerals with production centers in N. America. Has supporting commercial div. in Australia. Employees total over 2,200. Reply to—C. G. Bradshaw, Gen. Mgr. (Trading), Tricentrol Australia, Australia Sq. 31st Level, Sydney, N.S.W. 2000. Tel 27 7507.

Agricultural chemicals

28731—SWITZERLAND — Urea, 46 percent nitrogen. Requirement 100,000 metric tons. For immediate delivery or in part shipments upon agreement. Ammonium nitrate, 33.5 percent nitrogen. Granulated, dry coated. Water soluble. Requirement 60,000 mt for immediate delivery or in part shipments upon agreement. Ammonium sulfate, 21 percent nitrogen. Water soluble. Requirement 40,000 mt for immediate delivery or in part shipments upon agreement. Requests f.o.b. prices by telex or airmail special delivery with validity of one week. Payment against establishment of documentary credit. Destination: unspecified country in Middle East. Okinah is small import/export agency for raw materials, capital goods, crude oil, and petroleum products with good business relations in Middle East and Arab countries. Employs 4. Bankers: Swiss Credit Bank, PO Box, CH-8022, Zurich. Report solid financial situation and recommend firm as suitable trade contact. Total potential sales approx. $50 million. Reply to—Mr. Rene Gammal, Okinah AG Hoeschgasse 33, P.O. 459, CH-S034, Zurich. Cable: Okinah Zurich; tel. 01/47 05 47; telex: 53.388 Nacit Ch.

Petroleum refining

2911721—MALTA — Motor vehicles lubricants. Annual sales potential on local market est. about $120,000. Seeks U.S. company which can provide above product preferably on sole agency & distributorship basis to cover Malta & possibly any other nearby territory. Requests c.i.f. Malta prices. Ready to pay cash against document or letter of credit. Reply to—V. Azzopardi, Gen. Mgr., Continental Cars, Testaferrata St., Msida. Cable: Coluscar-Malta; tel. 30021, 36854.

Farm machinery

35230—SWITZERLAND—Wheel agricultural tractors, garden tractors; soil pulverizers and land rollers; combination hay mowers and conditioners; hay rakes; cultivators and weeders; feed power grinders and crushers; silo unloaders. Aebi is one of Switzerland's largest manufacturers and distributors of agricultural machinery. Est. 1883, employs 400. Capital stock SF 5 million. Excellent reputation. Sales territory: Switzerland and neighboring countries. Reply to—Peter J. Kym, Aebi & Co., AG, Maschinenfabrik, 3400 Burgdorf. Cable: Aebico Burgdorf; tel. 034/21 64 21.

Future Construction Abroad

QATAR—Firms interested in bidding on an 1800-ton per day **extension of Qatar Cement Company** should contact the consultants, Husband and Co., 388 Glossop Rd., Sheffield S10 2JB, United Kingdom. Tender documents will be sent out in January or February. Total value of project including 200,000-gallon per day **desalinization plant, civil works, and worker housing** estimated at roughly $50 million. Additional details available from Jack Randolph, U.S. Dept. of Commerce, Commerce Action Group for the Near East, 202-967-3993.

QATAR—There is still time for qualified firms to obtain tender documents for construction of a passenger terminal, the first stage of the **new international airport** at Doha. A copy of the scope of work and prequalification requirements available from Jack Randolph, U.S. Dept. of Commerce, Commerce Action Group for the Near East, 202-967-3993. Interested companies should telex the consultants; Gibb, Petermuller, and Partners — telex 215941 Athens. Tender documents for the next stage, i.e. runways, control tower, and customs offices, will be available in early 1975. Firms wishing to be considered should contact Gibb, Petermuller by telex or at P.O. Box 1385 (Omonia), Athens, Greece and the Director, Ministry of Public Works, P.O. Box 38, Doha, State of Qatar.

POLAND—POLIMEX-CEKOP, a government foreign trade enterprise, seeks construction, supervision, know-how, technology and equipment for a **polyurethane window producing plant,** needed as a result of largely increased building plans. Interested firms should reply to Andrzej Karwacki, Engineer, Research Center for the Woodwork Industry, Laskowa Street, Wolomin, Poland. Telex number is 762011.

JAMAICA — The Water Commission, 28 Church St., Kingston, has applied to the International Bank of Reconstruction and Development (World Bank) for a U.S.$18.7 million loan for construction of the **first phase of the Blue Mountain Water Supply Project.** This phase, to cover engineering drawings, tunnelling and installation of water mains (steel pipes) from the Yallahs River to a filtration plant, is expected to provide 13.5 million gallons of water daily. The Bank's response is expected in December and tenders for the first phase will be invited by the end of first quarter 1975.

LIBERIA—President William R. Tolbert, Jr., in his Independence Day address, discussed the proposed **"Power III" project to increase the generating capacity of the Monrovia electric power system.** According to the President, IBRD has determined that the Liberia Electricity Corp. (LEC) will require an additional 30 megawatts of generating capacity by 1978, and is considering granting a loan to LEC (a part of the Public Utilities Authority) to finance this project. U.S. firms interested in this project or any other aspect of the electric power generation, transmission and distribution fields in Liberia should write to: Taylor E. Major, Chairman, Public Utilities Authority, P.O. Box 165, Monrovia.

JAMAICA — The West Indies Sugar Co. (WISCO) is carrying out a six-month study to determine what additional sugar-based products it can produce. In the course of the ongoing study, company directors have already decided to have an independent **cane washing facility** installed close to the factory in Frome. WISCO is also study the feasibility of setting up a **paper manufacturing factory** at Frome. The principal raw material would be bagasse from the company's annual processing of more than one million tons of sugar cane. WISCO's Managing Director, Frank Thomlinson, stated that the company would need paper manufacturing equipment in the event the factory materializes. It further expected that a **special treatment plant** would have to be installed to cope with the anticipated increase of pollution in the Cabaritta River. The company has already signed an agreement with the local Ministry of Health & Environmental Control to adopt an anti-pollution plan estimated to cost about U.S.$275,000. Other areas under study are possible production of algernates for making jelloes and adhesives and manufacture of sugar-based detergents and animal feeds from separated bagasse protein cellulose mixed with molasses. Interested U.S. suppliers of **cane washing machinery, waste treatment plants, and papermaking machinery** should contact: Frank Thomlinson, Managing Director, West Indies Sugar Co., 5 Trevennion Rd., Kingston 5.

BOLIVIA—Bolivia is entering into a significant program **modernizing, enlarging and constructing new medical facilities.** This will present opportunities for U.S. hospital and medical equipment manufacturers, including construction and consulting companies. Included is an ambitious U.S.$35 million program to establish a rural social security system along with medical facilities over a 5-7 year period. A report from the American Embassy in La Paz discussing Bolivia's current and future projects and rural social security program is available from U.S. Department of Commerce, Trade Opportunities Program, Rm. 1322, Washington, D.C. 20230. Tel: 202-967-2251.

EGYPT—Representatives of companies from Japan, West Germany and Brazil signed an agreement in Cairo for construction of a **sponge iron conversion plant** to be located in Alexandria. Total capitalization of project estimated at $150 million, of which as much as $80 million could be in U.S. goods and services. Immediately following the signing ceremony, the new company signed a contract with the International Engineering Co. (IEC) of San Francisco, a subsidiary of Morison-Knudsen Co. and the H. K. Ferguson Co. of Cleveland, for complete engineering services needed to study feasibility and construct the facility. Plant output estimated at 1.6-2 million tons per year.

GHANA—Ghana Federal Ministry of Agriculture is interested in contracting for a small **beef slaughter house,** including installation. Contact: Dr. S. B. K. Quarterly, Chief Veterinary Officer, Ministry of Agriculture, Box M-37, Accra.

LAOS—Electricite de Laos (EDL), Vientiane, through its consulting engineers, Motor Columbus, Parkstrasse 27, 5401 Badenz, Switzerland, Telex 54 532, issues a call for bids on furnishing **two hydraulic steel structures with penstocks** for the Nam Ngum Hydropower Project, Phase II. Tenders for options for similar equipment for third phase also invited. Total project cost estimated at $25 million. Bid documents available for $50 from Motor Columbus. Bid deadline Dec. 30. Correspondents should refer "M-Pluess/SQU/10."

THAILAND—The Metropolitan Water Works Authority (MWWA) invites firms to bid on **clarifiers, pumps, air-blowers, butterfly valves, and service trucks** at various locations in Bangkok as follows: Four clarifiers to be installed in circular concrete tanks of 58 meters in diameter (tanks being constructed by other general contractors). Clarifiers are to be of solid contact upflow type. Maximum capacity of each is to be 200,000 CMD, with minimum sidewall depth of 15.18 meters and center

depth of about 7.5 meters. 24 pumps and three air-blowers, together with motors, motor control centers and speed control equipment, to be installed within structures being constructed by other general contractors. Blowers are to be rotary positive displacement type with capacity of 195 m^3 per minute. Pumps are to be horizontal axial flow type and horizontal suction volute type varying in capacity from 85 m^3 per minute to 400 m^3 per minute. Nineteen butterfly valves and operators with all appurtenances and accessories. Valves shall have nominal diameters of 1600 mm. to 2800 mm. and shall be steel body, flanged, with cast valve disc with stainless steel seating edges, with rubber seats in the valve body. Installation will be done by other general contractors. Two trucks with cab and chasis, diesel engine, special body, crane with hydraulic drum winch and cable, manual trolly hoist, diesel-generator unit not less than 125 KVA, motor control center, pump with power cable, portable discharge hose and all appurtenances to provide two mobile self contained units to be used to dewater valve caissons up to 30 meters deep. One spare pump to be furnished. Pumps to be fully submersible close coupled equal to Flygt model B.2250. Discharge hose to be 250 mm. Bid deadline Jan. 1. Successful bidder will be required to commence work on April 1 and complete contracted job on Sept. 30, 1977. Interested U.S. contractors can obtain tender documents from: Metropolitan Water Works Authority, Purchasing & Material Div., Siyak Mansri, Sapan Dam, Bangkok 1.

MEXICO — The Autonomous University of Guadalajara (Universidad Autonoma de Guadalajara or UAG) has begun work on the second stage of its development program. This 15-year project has been named the "City of Health" and will be located on almost 1,000 acres of land already obtained by the University about 20 minutes northwest of Guadalajara. Total cost estimated to be U.S.$70 million. Main objective of this enormous project is teaching of undergraduate and graduate students in different medical, para-medical, and sub-professional fields. First to be built will be schools for teaching bio-medical students, constructed under a new system which will utilize common services, such as blocks of classrooms, laboratories, auditoriums, with a centralized administration and a large information center. Simultaneously, a modern hospital-school will be built, including special services. Complementing the professional buildings will be a complex including a medical club, public cafeterias, houses and apartments, a shopping center, nursery, sports area, recreation centers, pool, and possibly a golf course. Project is responsibility of a special committee headed by Licensiado Antonio Leano Alvarez del Castillo, Vice-Rector of the University. A useful working level contact is Engineer Vicente Valle Herrera, Director of the General Committee for Planning and Development. Address for both is: Universidad Autonoma de Guadalajara, Paseo de las Aguilas 7000, Lomas del Valle, Guadalajara, Jalisco.

BAHRAIN—Comstock Intl., Ltd., presently constructing a new **$25 million medical center,** indicates that review and order of **hospital equipment** will take place shortly. Although some U.S. companies have already been notified, opportunity still exists for U.S. suppliers to furnish wide range of equipment used in major medical centers. Interested U.S. firms should contact Alan Hicks, Project Manager, P.O. Box 1026, Manama. Telex COMSTOCK GJ 331. Tel: 50818. Regional representatives of interested U.S. firms may wish to visit Mr. Hicks.

UNITED ARAB EMIRATES—Ahmad Awad, Director of Abu Dhabi Municipalities and Agriculture, P.O. Box 263, Abu Dhabi, United Arab Emirates, is seeking offers from American firms for **turn-key design and construction of the main fire station for Abu Dhabi Town.** Interested firms may contact Cherie Loustaunau, Commerce Action Group for the Near East, 202-967-3993.

PAKISTAN—In late July, the Government of Pakistan established the **National Power Construction Corp., Ltd.** The Corporation is a public limited company established to undertake **construction of power transmission lines and grid stations** for the Water and Power Development Authority (WAPDA). Mohammad Anwar Qureshi has been appointed Managing Director of the Corporation. The Corporation is preparing offices for itself at 46 Main Gulberg, Lahore. A Corporation spokesman stated that the new firm will concentrate on WAPDA projects, but will not restrict its activities to those projects. He said the Corporation will accept similar work from other sources, including the private sector. After it is fully established, the Corporation may also explore possibilities for activities in foreign countries. U.S. manufacturers and suppliers of products that might interest the Corporation may wish to contact the new entity.

NICARAGUA—Empresa Nacional De Luz Y Fuerza (ENALUF) has received a loan from IBRD and Banco Centro Americano de Intergracion Economica (BCIF) for financing the **transmission system for the Puerto Somoza Power Project.** Project will consist of approx. 19 KM of 230 KV double circuit transmission system from Puerto Somoza to La Paz and single circuit 230 KV transmission system from La Paz to Leon and La Paz to Los Brasiles Substations, approx. 68 kilometers. Target date for commercial operation is March 1976. Contract to be awarded under Phase V, Transmission System, will include following: manufacture, supply, fabrication, transportation, installation, testing and acceptance of and one year guarantee on all the transmission system as covered and/or specified in the written documents, and by applicable bidding drawings, which work presupposes the furnishing all tools, material, equipment, labor transportation and storage for performing all operations in connection with complete installation thereof. Spec. No. TS-1, 230 KV steel transmission towers; Spec. No. TS-2, transmission line materials; Spec. No. TS-3, conductors; Spec. No. TS-4, method of installation. Contracts under Phase V shall be awarded as a combination only. Interested bidders are requested to register themselves in writing with Empresa Nacional De Luz Y Fuerza or their consultants, The Kuljian Corp., at address below. Bidding documents are available from The Kuljian Corp., and ENALUF offices for $200 for three sets of bidding documents and one set of drawings, additional sets for $50 per set. Purchase price of bidding documents is not refundable. Documents will not be issued after Nov. 1. Bid due date is Dec. 1. The Kuliian Corp., 3624 Science Center, Philadelphia, Pa. 19104. Oficina De La Secretaria Del Consejo Directivo, Pista De Enlace (By-Pass), Apartado Postal No. 55, Managua, D.N., Nicaragua.

PANAMA—Instituto de Recursos Hidraulicos y Electrificacion (IRHE) has issued Notice of Invitation to Bid No. 443-74 for **supply, delivery and/or installation and test of electromechanical equipment for the addition to Panama Substation.** Bid deadline Dec. 12, at the Purchasing Department of IRHE, Poli Building, Justo Arosemena Ave. & 27 East St., Panama City. IRHE has received a loan from IBRD in various currencies equivalent to $30 million towards the foreign cost. All proposals must be made according to the laws of the Republic of Panama and the guidelines for procurements for World Bank loans, as detailed in the Bid Documents. Bid documents as well as all maps, plans, specifications, and proposal forms may be inspected at the IRHE's offices in Panama, at Chas. T. Main International, Inc., Prudential Center, Boston, Mass. 02199 or at Stone & Webster Overseas Consultants Inc., 90 Broad St., New York, N.Y. 10004, or at Panamanian Embassies. Complete set of documents may only be obtained directly from the offices of the IRHE in Panama or through the mail from P.O. Box 5285, Panama City, at a non-refundable payment of $25 per set.

ALGERIA—The Establissement National pour l'Exploitation Meteorologique et Aeronautique (ENEMA), Avenue de l' Independence, B.P. 829 Algiers, has extended the deadline for prequalification for the plan, design, study and construction supervision of a new **airport passenger and freight terminal, airplane parking extension, and related construction** until Nov. 30. Interested firms required to send professional references and details on similar projects undertaken in the past.

IRAN—Officials of the Iranian Ministry of Posts, Telephone, and Telegraph (PTT) would like to receive expressions of interest in **supply of equipment for the new Tehran Post Office** from U.S. manufacturers of mail and parcel sorting equipment. Equipment must have capacity to sort and move 375,000 pieces of mail per hour. Bid documents are expected to be ready about the middle of November. Interested firms can receive further details from Cherie Loustaunau, Commerce Action Group for the Near East, BIC, U.S. Department of Commerce, Washington, D.C. 20230. Phone 202-967-3993.

GERMAN DEMOCRATIC REPUBLIC—Plans are underway for a **large new slaughterhouse complex,** complete with housing, schools, etc. at Eberswalde, about 70 km northeast of Berlin. Capacity is to be 3,200 hogs and 800 cattle per day, and total cost about $90 million. Interested firms should contact: Director General of the organization Transinter, Syrirgeweg 21, 1055 Berlin, German Democratic Republic. Telephone: 53-07-01, Telex: 011 3082/3084. For further information on trading with East Germany, call or write D. Piggot, U.S. Department of Commerce, Trade Development Assistance Division, Bureau of East-West Trade, Room 4816, Washington, D.C. 20230; telephone 202-967-3352/3.

VENEZUELA—The creation of a system of fluvial waterways is under study by various Venezuelan government agencies. An agreement for the study of the Orinoco River and its confluents has been signed among the Ministry of Public Works, Centro Simon Bolivar, Caracas, the Venezuelan Guayana Corp. and the National Institute of Canalizations. The study committee is to investigate not only the possibilities of inland waterways but also problems of navigation, protection against flooding, land recovery and hydroelectric potential. Emphasis is to be on creation of inland waterways for domestic trade and for export facilitation and not so much on possibilities of the waterway between Venezuela and Brazil. It appears that the first step will be the expansion of Puerto Ordaz (Ciudad Guayana) into an ocean port. The Orinoco River is to be made navigable for ships of up to 18 feet draught up to Cabruta, where the plan calls for construction of a cargo break-up and transfer port. From there, the Apure River is to be made navigable to Guasdualito. This initial project would provide for the possibility of fluvial shipping from the cattle area of Apure state, the oil-rich areas north of the Orinoco, the steel & iron ore from Puerto Ordaz, and from there through the agricultural land of the delta to the ocean. Later, the Portuguesa, Arauca, Meta, Ventuari, Casiquiare and Rio Negro would be connected to that initial system and would provide 5,000 kilometers of inland waterways.

COLOMBIA—The Ministry of Mines and

Energy, Division Regional de Minas, invites firms to bid for a **complete turnkey package for design, construction and installation of a minerals beneficiation (flotation section), calcination, and sulfuric acid plants.** Finished products will be sulfuric acid and mineral ingots. Plants will be built near Ibague, State of Tolima, at an estimated cost of $24 million. 40 percent of the cost will be financed with Colombian Government resources. No sources of financing have been determined for the remaining 60 percent. Equipment required for the project are: mineral beneficiation machinery and equipment, including minerals flotation, separating, concentrating, calcination and lixiviation equipment; electroplating and foundry machinery and equipment; sulfuric acid manufacturing industries machinery and equipment. Deadlines have not been established, but prompt offers will be important since prefeasibility studies are expected to be concluded in early 1975. Contact: Dr. German Rodriguez, General Manager, Division Regional de Minas, Carrera 4D NO 39-129, Ibague (Tolima) Colombia.

NICARAGUA—Nicaragua's and Costa Rica's Power and Light Companies, ENALUF and ICE, request submissions of prequalification data from consulting firms to determine the **technical, economic, and financial feasibility of the projected interconnection of the National Electric Systems.** Data must be submited to both agencies not later than Dec. 10. Price and term offers will be asked from firms selected. Guidelines on prequalification requirements and extent of consultancy work desired can be obtained from Empresa Nacional de Luz y Fuerza (ENALUF), Vice Gerencia General, Apartado Postal 55, Managua, Nicaragua; and from Oficina de Proveeduria, Instituto Costaricense de Electricidad, San Jose, Costa Rica. There will be opportunities at a later date for the sale of U.S. transmission line, substations, controls, etc.

GHANA—State Fisheries Corp. is planning **construction of a fishing harbor at Elmina.** Deweger International, a Dutch firm with offices in Accra, has done two studies into the feasibility of setting up a fishing harbor and on controlling silt deposits in the harbor. $8-10 million will be needed to complete the project, for which IDA financing is a possibility. However, no formal financial commitment has as yet been made. Responsible Officer is Commander Boham, Managing Director, Ghana Fishing Corp., P.O. Box 211, Tema, Ghana. Other contact: Vander Waard & William Booth Laan, both at Deweger International, P.O. Box 705, Rotterdam 2, Holland.

GHANA—Volta River Authority plans expansion of power generating facilities. A team of Canadian consultants is currently conducting studies into the feasibility of building a hydroelectric dam at Kpong. The undertaking, sponsored by a grant from the Canadian Government, is scheduled to be completed in December. The Volta River Authority also intends to reactivate the Bui Dam project. After the studies are completed the government plans to seek soft loans from various financial sources. The estimated construction costs of Kpong and Bui are $89,340,000 and $146,133,000, respectively. Intended installed capacity at Kpong is 188-200 megawatts, while Bui's megawatt capacity is expected to be 300. Responsible Officer: K. A. Duker, Director of Engineering, Volta River Authority, P.O. Box M.77, Accra.

MEXICO—One of Mexico's largest shopping malls is under construction in the northwest suburb of Guadalajara. The shopping plaza, Plaza Patria, will be completely covered and air-conditioned with two levels of shops and parking below. The 45,000 sq. meters of commercial space will be occupied by 160 shops including one department store, one supermarket, two movie theaters, and a multitude of small stores offering consumer goods and services. About 90 percent of the space has already been rented and the shops should open for business during the first quarter of next year. The engineering firm of Chaix and Johnson of Los Angeles was used as technical consultants. Estimated construction cost nearly U.S.$25 million. The Plaza Patria is being developed by a consortium of 10 local businessmen including Charles Vachez, honorary French Consul and owner of Fabricas de Francia department stores, and Antonio Hemuda Debs, founder of Guadalajara's second largest supermarket chain. Mr. Vachez plans to from another consortium to begin a new **shopping plaza project of 65 shops in Leon, Guanajuato,** next year; estimated cost U.S.-$6.5 million. Developer: Charles Vachez, Fabricas de Francia, 3rd Fl., Plaza del Sol, Guadalajara, Tel: 21-03-50. Principal Architect: Jacinto Arenas, Avenida Americas 999, 23rd Fl., Guadalajara, Tel: 16-50-48.

HONG KONG—Following is further information on the **10-year plan for redevelopment of the central district of Hong Kong.** Alexandra House will be replaced with a 32-story office building. The first 15 storys will be ready for tenants by late 1976. A 45-story office tower will replace the Gloucester Building. Work will start in late 1976. Completion date has not been set. The present Lane Crawford Building will be replaced by 20,000 sq. ft. of public leisure area. Some small shops, and restaurants will be allowed in the area. Starting dates have not been set. Marina House and Edinburgh House will come under the demolition hammer in 1979; two 45-story office complexes will take their place. All the above buildings will be linked by covered foot-bridges. Hong Kong Land could finance U.S.$120 million over the next 10 years from their existing cash flow. When additional capital is required, they will ask for loans on the international capital markets. U.S. construction engineers and building suppliers may have opportunities to participate in the above. They should write to: V. O. Roberts, Gen. Mgr., The Hong Kong Land Co., Ltd., Gloucester Bldg., 1/F, Hong Kong.

MEXICO—A 19-story modern office building is rising one block from the U.S. Consulate General on La Paz Avenue. Complete with underground parking and ground floor shops, this building of reinforced concrete represents an investment of about U.S. $500,000. The construction company is interested in purchasing a **multicrane and a concrete block machine** to make 20x20x40 centimeter blocks. Five-year financing is required. Developer: Luis Renichet, Av. del Sur 178, Guadalajara, Tel: 253759. Architect: Paulino Restelli, Director, Lopez Mateos Sur 235, Guadalajara, Tel: 159363. Constructor: Luis Vazquez Guerra, Engineer, Manuel Acuna 3171, Guadalajara, Tel: 164400.

Australian Firm Seeks Wide Variety Of Mining Equipment

David C. Tennent & Assoc. operate as mining consultants through mineral-rich northern and eastern Australia and wish to make contact with potential U.S. suppliers of mining equipment of all types for use in underground mining, open-cut quarrying, or tunneling operations. In their involvements with various mining firms, Tennent & Assoc. are often requested to locate and recommend equipment for purchase for use in companies' mines. Mr. Tennent wishes to act as an agent or distributor for U.S. companies which manufacture equipment suitable for the purposes of his clients.

For this reason he requests literature and prices to enable the making of evaluations of the suitability of equipment. Among products of interest are: airtools, automated control systems, remote control systems, drill bits, bit sharpening and repair equipment, cement additives, concrete placing equipment, special purpose cements, communications equipment, shotcreting applications and equipment, conveyors and systems, remote control doors, epoxy resins, engine exhaust cleaners and conditioners, ventilation fans, rock mechanics instrumentation, underground lighting equipment, noise suppression equipment, roof pinning, rock impactors, safety equipment & devices, sampling tools, tire protection devices. Interested U.S. firms should write: David C. Tennent & Assoc., c/o Spry Walker & Co., Floor 7, 27 Turbot St., Brisbane, Queensland, 4000.

Senegal Seeks Plants For Free Trade Zone

The Government of Senegal is establishing an industrial free trade zone for export industries in M'Bao, a suburb east of Dakar. The area of the zone is planned eventually to reach 600 hectares (1,500 acres) with room for 250 plants.

The Senegalese hope to interest private investors from Europe, the United States, Japan, and other industrialized nations in putting up plants in the zone. Production would be exported to European, African, and American markets. The Senegalese envision industries such as textiles, electronics, shoes, and other assembly operations which could take advantage of Senegal's abundant supply of semi-skilled workers. The government plans extensive training programs to provide workers with the skills foreign investors will require. The land will remain the property of the government and investors will be granted 99-year leases.

Among advantages which will be offered to investors on a 25-year renewable basis are: transfer of profits; exemption from all taxes; duty-free import of all equipment, raw materials, and semi-finished goods; streamlined administration through the independent zone administrator; and IBRD arbitration of any disagreement. A firm must invest 200 million CFA ($800,000) and create jobs for at least 150 Senegalese.

French Mail Order Company Suggests Joint Operations

A French mail order firm created 20 years ago by its current president, which now occupies a place among the major mail order houses for textile products (household linen, apparel for men, women and children) seeks cooperative arrangements with an American firm specialized in the mail order business in order to develop joint mail order marketing operations throughout Europe. The French firm currently handles an annual volume of $20 million and in the past few years sales have been increasing 30 percent annually. Its cardex of addresses includes two million names.

The firm belongs to the French Mail Order Houses Association. It desires to diversify its activities in the following ways: increase the range of products; initiate cooperative purchasing and sales agreements with an American mail order house specializing in so-called "One Shot," individual offers of non-textile quality products sold to family-type buyers; create a company in common with the U.S. firm with a European marketing territory as an outcome of the cooperative agreement.

Interested American firms should write and forward their catalogs to the Commercial Attache, American Embassy, 2 Avenue Gabriel, 75008—Paris, France.

☆ U.S. Government Printing Office: 1974, 582-683/8

Commerce Department Directory

Commerce Building, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20230, (202) 783-9200

FREDERICK B. DENT, Secretary of Commerce

JOHN K. TABOR, Under Secretary of Commerce

SECRETARIAL OFFICERS

WILLIAM W. BLUNT, Jr., Asst. Secretary for Economic Development

GUY W. CHAMBERLIN, Jr., Acting Asst. Secretary for Administration

JAMES L. PATE, Asst. Secretary for Economic Affairs

BETSY ANCKER-JOHNSON, Asst. Secretary for Science and Technology

ROBERT J. BLACKWELL, Asst. Secretary for Maritime Affairs (Maritime Administration)

C. LANGHORNE WASHBURN, Asst. Secretary for Tourism (United States Travel Service)

KARL E. BAKKE, General Counsel

TILTON H. DOBBIN, Asst. Secretary for Domestic and International Business (Domestic and International Business Administration)

HEADS OF OPERATING UNITS

ROBERT M. WHITE, National Oceanic and Atmospheric Administration

C. MARSHALL DANN, Patent Office

RICHARD W. ROBERTS, National Bureau of Standards

VINCENT P. BARABBA, Bureau of the Census

GEORGE JASZI, Bureau of Economic Analysis

EDWARD D. FAILOR, Social and Economic Statistics Administration

JOHN M. RICHARDSON, Acting, Office of Telecommunications

WILLIAM T. KNOX, National Technical Information Service

ALEX M. ARMENDARIS, Office of Minority Business Enterprise

Domestic and International Business Administration

SETH BODNER, Bureau of Resources and Trade Assistance

LEWIS W. BOWDEN, Acting, Bureau of East-West Trade

CHARLES W. HOSTLER, Bureau of International Commerce

JOHN P. KEARNEY, Ombudsman for Business

SAMUEL B. SHERWIN, Bureau of Domestic Commerce

(Vacant) Office of Field Operations

DISTRICT OFFICES

ALBUQUERQUE, N.M., 87101, Room 316, U.S. Courthouse (505) 766-2386.

ANCHORAGE, 99501, 632 Sixth Ave., Hill Bldg., Suite 412 (907) 265-4597.

***ATLANTA,** 30309, Suite 523, 1401 Peachtree St., NE. (404) 526-6000.

BALTIMORE, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

BIRMINGHAM, ALA., 35205, Suite 200-201, 908 S. 20th St. (205) 325-3327.

BOSTON, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

BUFFALO, N.Y., 14202, Room 910, Federal Bldg., 111 W. Huron St. (716) 842-3208.

CHARLESTON, W.VA., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

CHEYENNE, WYO., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave. (307) 778-2151.

***CHICAGO,** 60603, Room 1406, Mid-Continental Plaza Bldg., 55 E. Monroe St. (312) 353-4450.

CINCINNATI, 45202, 8028 Federal Office Bldg., 550 Main St. (513) 684-2944.

CLEVELAND, 44114, Room 600, 666 Euclid Ave. (216) 522-4750.

COLUMBIA, S.C., 29204, Forest Center, 2611 Forest Dr. (803) 765-5345.

***DALLAS,** 75202, Room 3E7, 1100 Commerce St. (214) 749-1515.

DENVER, 80202, Room 161, New Custom House, 19th and Stout Sts. (303) 837-3246.

DES MOINES, IOWA, 50309, 609 Federal Bldg., 210 Walnut St. (515) 284-4222.

DETROIT, 48226, 445 Federal Bldg. (313) 226-3650.

GREENSBORO, N.C., 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950. (919) 275-9111, Ext. 345.

HARTFORD, CONN., 06103, Room 610-B, Federal Office Bldg., 450 Main St. (203) 244-3530.

HONOLULU, 96813, 286 Alexander Young Bldg., 1015 Bishop St. (808) 546-8694.

HOUSTON, 77002, 201 Fannin, 1017 Federal Office Bldg. (713) 226-4231.

KANSAS CITY, MO., 64106, Room 1840, 601 E. 12th St. (816) 374-3142.

LOS ANGELES, 90024, 11201 Federal Bldg., 11000 Wilshire Blvd. (213) 824-7591.

MEMPHIS, 38103, Room 710, 147 Jefferson Ave. (901) 534-3213.

MIAMI, 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. (305) 350-5267.

MILWAUKEE, 53203, Straus Bldg., 238 W. Wisconsin Ave. (414) 224-3473.

MINNEAPOLIS, 55401, 306 Federal Bldg., 110 S. Fourth St. (612) 725-2133.

NEW ORLEANS, 70130, Room 432, International Trade Mart, 2 Canal St. (504) 527-6546.

***NEW YORK,** 10007, 41st Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

NEWARK, N.J., 07102, Gateway Bldg. (4th floor) (201) 645-6214.

***PHILADELPHIA,** 19106, 10112 Federal Bldg., 600 Arch St. (215) 597-2850.

PHOENIX, ARIZ., 85004, 508 Greater Arizona Savings Bldg., 112 N. Central Ave. (602) 261-3285.

PITTSBURGH, 15222, 431 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

PORTLAND, ORE., 97205, 921 S.W. Washington St., Suite 521, Pittock Block. (503) 221-3001.

RENO, NEV., 89502, 2028 Federal Bldg. 300 Booth St. (702) 784-5203.

RICHMOND, VA., 23240, 8010 Federal Bldg., 400 N. 8th St. (804) 782-2246.

ST. LOUIS, 63105, Chromalloy Bldg., 120 S. Central Ave. (314) 622-4243.

SALT LAKE CITY, 84111, 1201 Federal Bldg., 125 S. State St. (801) 524-5116.

***SAN FRANCISCO,** 94102, Federal Bldg., Box 36013, 450 Golden Gate Ave., (415) 556-5860.

SAN JUAN, P.R., 00902, Room 100, Post Office Bldg. (809) 723-4640.

SAVANNAH, 31402, 235 U.S. Courthouse and Post Office Bldg., 125-29 Bull St. (912) 232-4321, Ext. 204.

SEATTLE, 98109, 706 Lake Union Bldg., 1700 Westlake Ave. North (206) 442-5615.

* Regional Offices

UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE
First-Class Mail

U.S.MAIL

CRTD UNIVM300U R 1
UNIV MICROFILMS
SERIALS SECTION
300 NO ZEEB RD
ANN ARBOR MI 48106

NEW

FT 146—U.S. IMPORTS FOR CONSUMPTION, TSUSA Commodity by Country of Origin

Featuring monthly statistics on:

- **f.a.s. (free alongside ship) data—value of goods at foreign port of exportation**
- **c.i.f. (cost, insurance, freight) data—value of goods at first port of entry in U.S.A.**

The new import data, in addition to the customs data presented previously in the FT 246, will appear in the FT 146 starting with statistics for January 1974.

Use this coupon to subscribe to this new monthly publication with the new data.

SUBSCRIPTION ORDER FORM

C56::210-146

ENTER MY SUBSCRIPTION TO FT 146-U.S. IMPORTS FOR CONSUMPTION (TSUSA COMMODITY BY COUNTRY OF ORIGIN) at $148.60. Add $37.15 for foreign mailing. No additional postage is required for mailing within the United States, its possessions, Canada, Mexico, and all Central and South American Countries except Argentina, Brazil, British Honduras, French Guiana, Guyana, and Surinam. For shipment to all other foreign countries include additional postage as quoted for each periodical or subscription service.

☐ Remittance Enclosed **(Make checks payable to Superintendent of Documents)**

☐ Charge to my Deposit Account No.

Send Subscription to:

NAME—FIRST, LAST

COMPANY NAME OR ADDITIONAL ADDRESS LINE

STREET ADDRESS

CITY | STATE | ZIP CODE

PLEASE PRINT

MAIL ORDER FORM TO:
Superintendent of Documents
Government Printing Office
Washington, D.C. 20402